

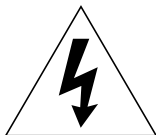
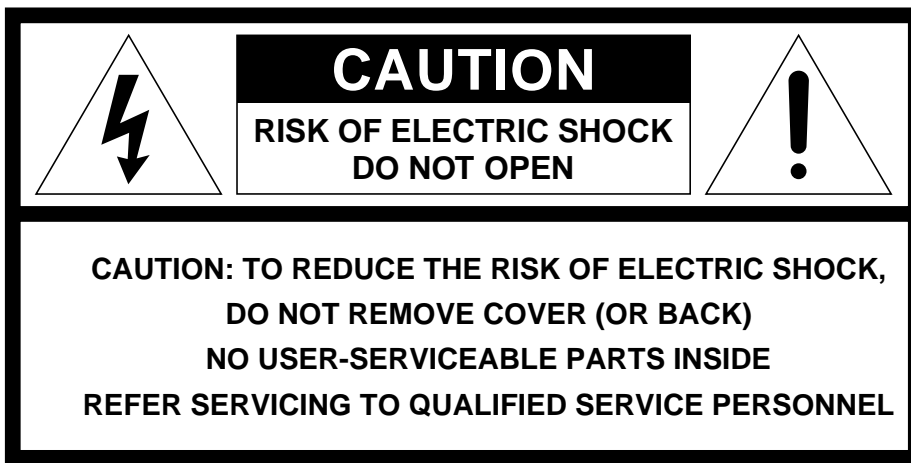
marantz®

Model CD110 User Guide

CD Player

CLASS 1 LASER PRODUCT
KLASSE 1 LASER PRODUKT
I.H.T. IEC 825

COMPACT
disc
DIGITAL AUDIO
TEXT



The lightning flash with arrowhead symbol, within an equilateral triangle, is intended to alert the user to the presence of uninsulated “dangerous voltage” within the product’s enclosure that may be of sufficient magnitude to constitute a risk of electric shock to persons.



The exclamation point within an equilateral triangle is intended to alert the user to the presence of important operating and maintenance (servicing) instructions in the literature accompanying the appliance.

WARNING

**TO REDUCE THE RISK OF FIRE OR ELECTRIC SHOCK,
DO NOT EXPOSE THIS APPLIANCE TO RAIN OR MOISTURE.**

**CAUTION: TO PREVENT ELECTRIC SHOCK, MATCH WIDE
BLADE OF PLUG TO WIDE SLOT, FULLY INSERT.**

**ATTENTION: POUR ÉVITER LES CHOCS ÉLECTRIQUES,
INTRODUIRE LA LAME LA PLUS LARGE DE LA FICHE DANS
LA BORNE CORRESPONDANTE DE LA PRISE ET POUSSER
JUSQU’AU FOND.**

LASER SAFETY

This unit employs a laser. Only a qualified service person should remove the cover or attempt to service this device, due to possible eye injury.

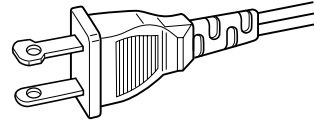
**CAUTION : USE OF CONTROLS OR ADJUSTMENTS
OR PERFORMANCE OF PROCEDURE
OTHER THAN THOSE SPECIFIED HEREIN
MAY RESULT IN HAZARDOUS RADIATION
EXPOSURE.**

SAFETY INSTRUCTIONS

READ BEFORE OPERATING EQUIPMENT

This product was designed and manufactured to meet strict quality and safety standards. There are, however, some installation and operation precautions which you should be particularly aware of.

1. Read Instructions — All the safety and operating instructions should be read before the appliance is operated.
2. Retain Instructions — The safety and operating instructions should be retained for future reference.
3. Heed Warnings — All warnings on the appliance and in the operating instructions should be adhered to.
4. Follow Instructions — All operating and use instructions should be followed.
5. Water and Moisture — The appliance should not be used near water — for example, near a bathtub, wash-bowl, kitchen sink, laundry tub, in a wet basement, or near a swimming pool, etc.
6. Carts and Stands — The appliance should be used only with a cart or stand that is recommended by the manufacturer.
7. An appliance and cart combination should be moved with care. Quick stops, excessive force, and uneven surfaces may cause the appliance and cart combination to overturn.
8. Wall or Ceiling Mounting — The appliance should be mounted to a wall or ceiling only as recommended by the manufacturer.
9. Ventilation — The appliance should be situated so that its location or position does not interfere with its proper ventilation. For example, the appliance should not be situated on a bed, sofa, rug, or similar surface that may block the ventilation openings; or, placed in a built-in installation, such as a bookcase or cabinet that may impede the flow of air through the ventilation openings.
10. Heat — The appliance should be situated away from heat sources such as radiators, heat registers, stoves, or other appliances (including amplifiers) that produce heat.
11. Power Sources — The appliance should be connected to a power supply only of the type described in the operating instructions or as marked on the appliance.
12. Grounding or Polarization — The precautions that should be taken so that the grounding or polarization means of an appliance is not defeated.



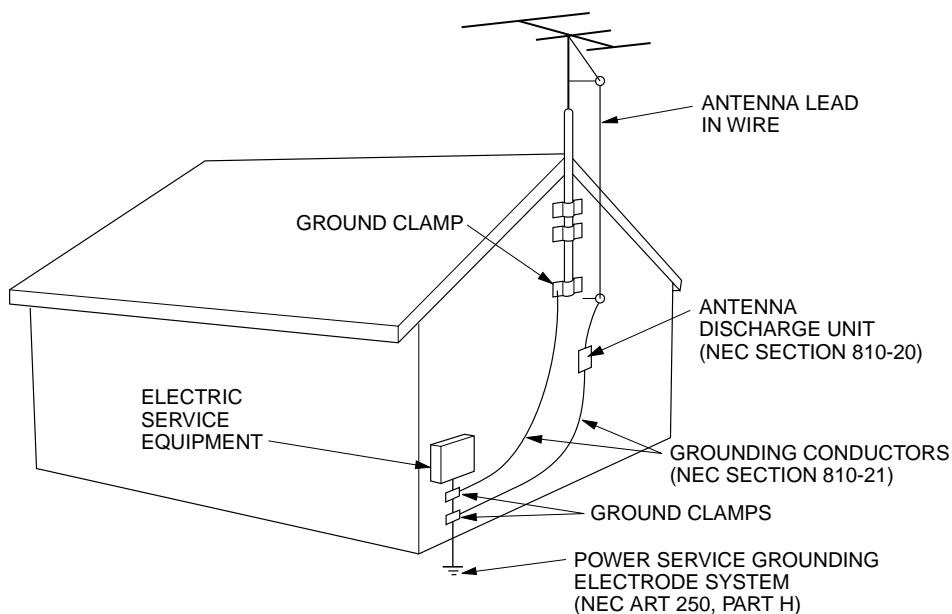
AC POLARIZED PLUG

13. Power-Cord Protection — Power-supply cords should be routed so that they are not likely to be walked on or pinched by items placed upon or against them, paying particular attention to cords at plugs, convenience receptacles, and the point where they exit from the appliance.
14. Cleaning — The appliance should be cleaned only as recommended by the manufacturer.
15. Power Lines— An outdoor antenna should be located away from power lines.
16. Outdoor Antenna Grounding — If an outside antenna is connected to the receiver, be sure the antenna system is grounded so as to provide some protection against voltage surges and built up static charges. Section 810 of the National Electrical Code, ANSI/NFPA No. 70-1984, provides information with respect to proper grounding of the mast and supporting structure, grounding of the lead-in wire to an antenna discharge unit, size of grounding conductors, location of antenna-discharge unit, connection to grounding electrodes, and requirements for the grounding electrode. See Fig. 1.
17. Nonuse Periods — The power cord of the appliance should be unplugged from the outlet when left unused for a long period of time.
18. Object and Liquid Entry — Care should be taken so that objects do not fall and liquids are not spilled into the enclosure through openings.
19. Damage Requiring Service — The appliance should be serviced by qualified service personnel when:
 - A. The power-supply cord or the plug has been damaged; or
 - B. Objects have fallen, or liquid has spilled into the appliance; or
 - C. The appliance has been exposed to rain; or
 - D. The appliance does not appear to operate normally or exhibits a marked change in performance; or
 - E. The appliance has been dropped, or the enclosure damaged.
20. Servicing — The user should not attempt to service the appliance beyond that described in the operating instructions. All other servicing should be referred to qualified service personnel.



FIGURE 1

EXAMPLE OF ANTENNA GROUNDING ACCORDING TO NATIONAL ELECTRICAL CODE INSTRUCTIONS CONTAINED IN ARTICLE 810 - "RADIO AND TELEVISION EQUIPMENT"



NEC - NATIONAL ELECTRICAL CODE

NOTE TO CATV SYSTEM INSTALLER:

This reminder is provided to call the CATV (Cable-TV) system installer's attention to Article 820-40 of the NEC, which provides guidelines for proper grounding and, in particular, specifies that the cable ground shall be connected to the grounding system of the building, as close to the point of cable entry as practical.

NOTE:

This equipment has been tested and found to comply with the limits for a Class B digital device, pursuant to Part 15 of the FCC Rules. These limits are designed to provide reasonable protection against harmful interference in a residential installation. This equipment generates, uses and can radiate radio frequency energy and, if not installed and used in accordance with the instructions, may cause harmful interference to radio communications. However, there is no guarantee that interference will not occur in a particular installation. If this equipment does cause harmful interference to radio or television reception, which can be determined by turning the equipment off and on, the

user is encouraged to try to correct the interference by one or more of the following measures:

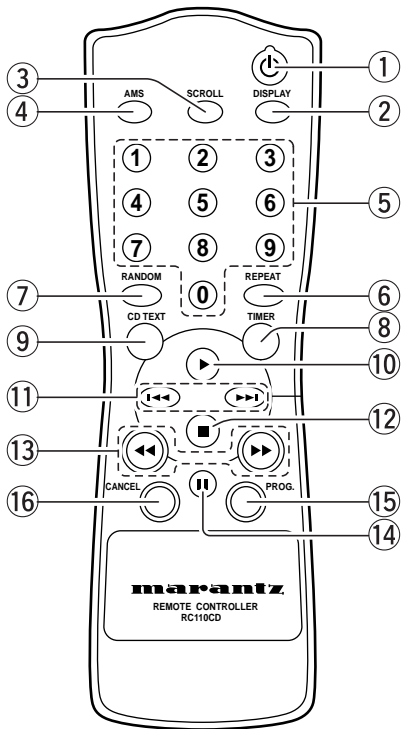
- Reorient or relocate the receiving antenna.
- Increase the separation between the equipment and receiver.
- Connect the equipment into an outlet on a circuit different from that to which the receiver is connected.
- Consult the dealer or an experienced radio/TV technician for help.

NOTE: Changes or modifications may cause this unit to fail to comply with Part 15 of the FCC Rules and may void the user's authority to operate the equipment.

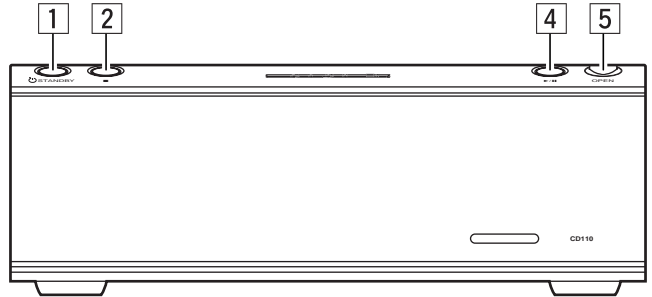
This Class B digital apparatus complies with Canadian ICES-003.

Cet appareil numérique de la Classe B est conforme à la norme NMB-003 du Canada.

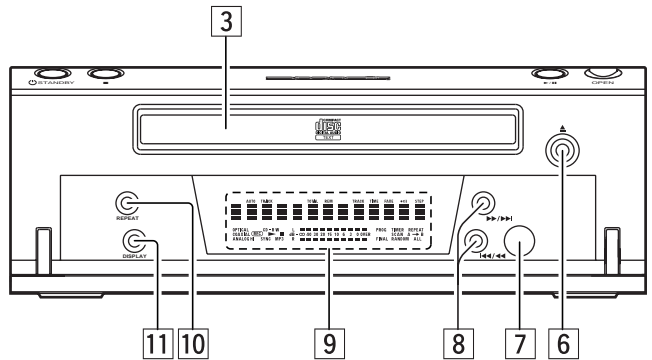
REMOTE CONTROL UNIT



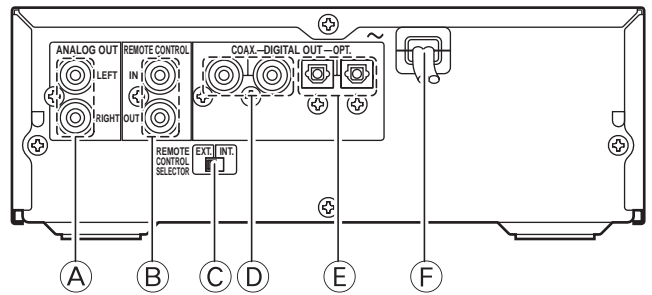
MAIN UNIT (FRONT - CLOSED)



MAIN UNIT (FRONT - OPENED)



MAIN UNIT (REAR)



ABOUT THIS USER GUIDE

Refer to the figures on page iv of this user guide. The numbers on the figures correspond to those in the text. All references to the connections and controls that are printed in **BOLD** type are as they appear on the unit.

PRECAUTIONS

The following precautions should be taken when operating the equipment.

GENERAL PRECAUTIONS

When installing the equipment ensure that:

- the ventilation holes are not covered.
- air is allowed to circulate freely around the equipment.
- it is placed on a vibration-free surface.
- it will not be exposed to excessive heat, cold, moisture or dust.
- it will not be exposed to direct sunlight.
- it will not be exposed to electrostatic discharges.

In addition, never place heavy objects on the equipment.

If a foreign object or water does enter the equipment, contact your nearest dealer or service center.

Do not pull out the plug by pulling on the mains lead; grasp the plug.

It is advisable when leaving the house, or during a thunderstorm, to disconnect the equipment from the mains supply.

COMPACT DISCS

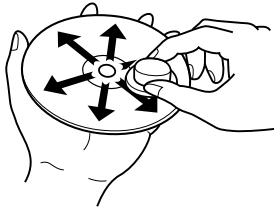
The glossy side shining like a rainbow is the front side of the disc, and the side on which the label is printed is the back. Unlike conventional turntables for playing analog discs, the CD110 Compact Disc Player reads the information recorded on the disc from underneath without contacting it using a beam of laser light. Therefore, the performance of a compact disc will not degrade like conventional analog records. Handle discs carefully so as not to damage or scratch the front side.

To protect the disc, avoid placing it in the following locations:

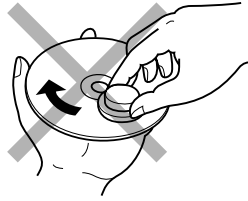
- In direct sunlight or near a source of heat like a heater.
- In a place which is damp or dirty.
- In a place which could be exposed to rain, such as near a window.

Always keep the disc surface clean.

Up to six billion data units are recorded on the front side of the disc. When cleaning the disc surface, always be sure to use a special compact disc cleaner and wipe as shown below.



Wipe in a radial direction.

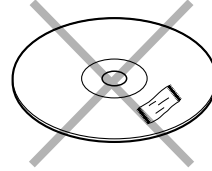


Do not wipe in circumferential direction.

- Do not use conventional record cleaner for analog records, as this will adversely affect the disc surface. Store discs properly by placing them in their disc cases.

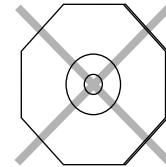
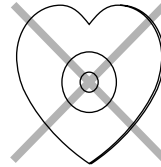
- Do not attach a piece of paper or sticker on the label side of disc.

When a disc has a piece of plastic tape or rental CD label with paste protruded from the edge or when a disc has a trace of such a sticky object, do not attempt to play the disc. If such a disc is played on the CD player, impossibility of taking out the disc or other malfunction may result.



- Do not use a disc with a special shape.

Do not attempt to play a disc with a special shape such as a heart-shaped disc or octagonal disc. Otherwise the equipment malfunction may result.



REMOTE CONTROL UNIT

① (Standby) button

Press to turn the unit's power on or set it to the standby mode. (Operation is not possible if the unit is connected to the SR110, the SR110's rear switch is set to SYSTEM and the CD110's REMOTE CONTROL SELECTOR EXT/INT switch is at EXT.)

② **DISPLAY** button

Press to change what is shown on the display from the disc information to the clock display, etc. (The clock display appears only when the unit is used on its own.)

③ **SCROLL** button

Press to scroll the text display of discs that support text.

④ **AMS** button

Press to play the first 10 seconds of all the tracks on the disc in sequence starting with the first track.

⑤ **Numeric** buttons

Press to specify track numbers directly. These buttons cannot be used with MP3 discs.

⑥ **REPEAT** button

Press for repeat play. Each time the button is pressed, the mode changes in the following sequence:
All track repeat $\overline{\text{fi}}$ 1-track repeat $\overline{\text{fi}}$ clear.

⑦ **RANDOM** button

Press for random play to play the tracks in a random sequence.

⑧ **TIMER** button

Press to set the timer and clock. (These settings can be performed only when the unit is used on its own.)


⑨ **CD TEXT** button


Press to switch what is shown on the display from disc information to text when a CD-TEXT compatible disc is used.

⑩ (Play) button

Press to start play.

⑪ buttons


 : Press to play from the start of the track now playing. When they are pressed again within 1 second after it was pressed the first time, play starts from the track before.


 : When pressed once, play starts from the next track.

⑫ (Stop) button

Press to stop disc play.

⑬ buttons

 : Press to forward-search through the track now playing.

 : Press to reverse-search through the track now playing. These buttons cannot be used during MP3 disc play.

⑭ (Pause) button

Press to stop disc play temporarily.

⑮ **PROG.** button

Press for program play.

This button cannot be used with MP3 discs.

⑯ **CANCEL** button

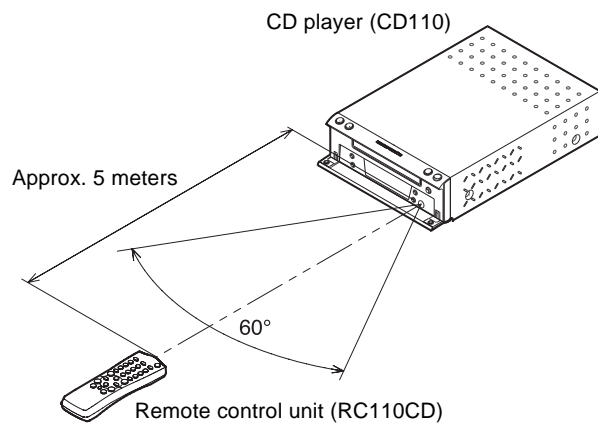
Press to cancel a programmed track.

OPERATION OF REMOTE CONTROL UNIT

1. REMOTE CONTROL

The distance between the transmitter of the remote control unit and the IR SENSOR of the CD110 should be less than about 5 meters. If the transmitter is pointed to a direction other than the IR SENSOR or if there is an obstacle between them, remote control may not be possible.

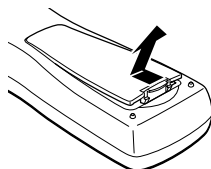
Remote-controllable range



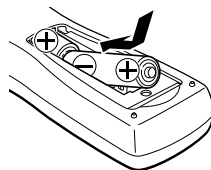
2. LOADING BATTERIES

The life of the batteries used with the remote control unit is about 6 months with normal use. Also be sure to replace batteries earlier when you notice that they are getting weak.

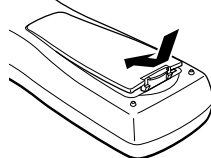
1. Remove the back cover.



2. Insert the new batteries (AA type) with correct (+) and (-) polarity.



3. Close until it clicks.



REAR PANEL

A ANALOG OUT jacks

These are the output jacks for the analog audio signals. Connect them to the **CD** or **AUX** jacks, etc. on the amplifier using the supplied analog connecting cord. Remember that the white jack is for the LEFT channel and the red jack is for the RIGHT channel, and connect the jacks correctly.

* Never connect these jacks to the **PHONO** jacks of the amplifier.

B REMOTE CONTROL IN/OUT jacks

The remote control operations of a system can be performed by connecting the unit to a Marantz D-BUS compatible audio component using the supplied remote control cable.

C REMOTE CONTROL SELECTOR EXT./INT. switch

When the unit is to be used on its own, set this selector to "INT", and when connecting the unit to Marantz audio components equipped with a D-BUS compatible remote sensor window using the remote control cable for use as part of a system, set the selector to "EXT".

* Remote control operations cannot be performed if the **REMOTE CONTROL SELECTOR** is set to "EXT" when the unit is to be used on its own.

D DIGITAL OUT COAX. jacks

The CD signals during playback are output digitally to these jacks. Connect these jacks to a recorder component, amplifier, D/A converter or other unit equipped with coaxial digital input jacks using a coaxial cable obtainable from your audio dealer.

E DIGITAL OUT OPT. jacks

The CD signals during playback are output digitally to these jacks. Connect these jacks to a recorder component, amplifier, D/A converter or other unit equipped with optical digital input jacks using a square optical cable obtainable from your audio dealer.

F Power cord jack

Connect this to a household AC 120 V outlet.

FRONT PANEL

1 Standby button

Press to switch the power ON, and press again to switch it OFF.

* If the SR110 is connected to the REMOTE CONTROL jacks on the rear panel and its power is ON, the unit will not be set to the standby mode even when this button is pressed.

2 (Stop) button

Press to stop play.

3 Disc tray

Place a disc on the tray with its label surface facing up.

4 (Play/Pause) button

Press to start play or temporarily stop play.

5 OPEN button

Press to open the front panel.


6 (Open/Close) button


When this button is pressed, the disc tray opens so place the disc on the tray with its label surface facing up. When it is pressed again the disc tray closes.

7 Infrared sensor

This sensor is for receiving signals transmitted from the remote control unit.

8 (Track search/Skip) buttons

 : When pressed once, play starts from the next track. When held down for more than one second, the track being played is searched in the forward direction.

 : When pressed once, play resumes from the start of the track now playing. When it is pressed again within 1 second after it was pressed the first time, play starts from the track before. When held down for more than one second, the track being played is searched in the reverse direction.

9 Display panel

This panel displays the operating modes and statuses.

10 REPEAT button

Press for repeat play. Each time the button is pressed, the mode changes in sequence from "1-track repeat" fi "all track repeat" fi "clear."

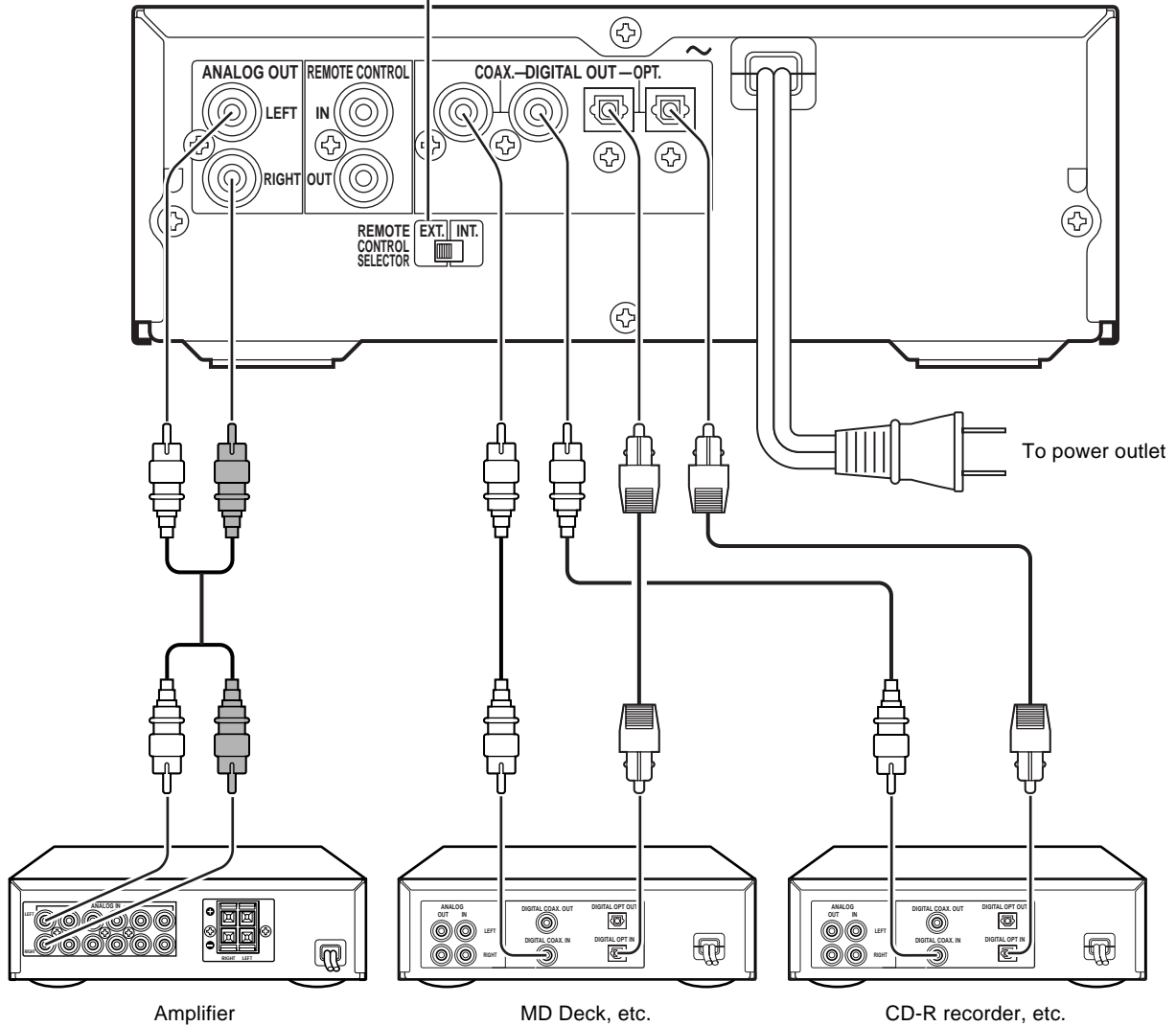
11 DISPLAY button

Press to select the time display. Each time the button is pressed during play, the display changes in sequence from "elapsed track time" fi "remaining track time" fi "total remaining time" fi "clock display" (when the unit is used on its own) fi "elapsed track time." If this button is pressed in the standby mode when the unit is being used on its own, the power-on mode is established for 10 seconds, during which time the clock display appears.

CONNECTIONS

When this unit is to be used on its own, set the **REMOTE CONTROL SELECTOR** to INT, and when connecting the unit to Marantz audio components equipped with a D-BUS compatible remote sensor window using the remote control cable for use as part of a system, set the **REMOTE CONTROL SELECTOR** to EXT.

* Remote control operations cannot be performed if the **REMOTE CONTROL SELECTOR** is set to EXT when this unit is to be used on its own.



* If this unit is to be used as part of a system, refer to the SR110 User Guide.

CONCERNING CD-TEXT

A new type of music CD produced by recording the album name, track names and other text information as well as music on a conventional CD is called CD-TEXT.

The text information is recorded on parts which were not used by conventional music CDs. For this reason, these CDs can be still played back on existing CD players as in the past whereas if a CD-TEXT compatible player such as this unit is used instead, their text information can be viewed as well.

Using the accessory remote control unit, this unit enables the album names and track names to be shown on the display window. Depending on the disc, however, not all the information may have been recorded.

- With this unit, up to 13 characters of this information can be displayed at one time. If the disc has more text information, the characters are scrolled (see *) from right to left facing the display window.

* Scrolling means moving through the text which is being displayed.

- This unit supports only alphanumerics and symbols: Chinese characters ('kanji'), hiragana and katakana are not displayed. (Nothing appears on the display when the text information consists solely of Chinese characters, hiragana and katakana.)

By pressing the CD TEXT button on the remote control unit, the following items of TEXT information on a CD-TEXT disc can be displayed in sequence.

– During play:

Each time the button is pressed, what is displayed is switched between the name of the track being played and the time.

– In the stop mode:

Each time the button is pressed, what is displayed is switched between the album's title and the time.

CONCERNING CD-RW DISC PLAY

In addition to conventional music CDs and CD-R (Recordable) discs, this unit can also play CD-RW (ReWritable) discs.

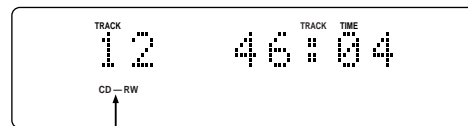
- The TOC (see *) must have been recorded correctly for CD-R or CD-RW playback. Writing the TOC information using a CD recorder is known as finalizing. Bear in mind that if the finalizing work has not been completed correctly for a disc, the disc will not be recognized correctly as a music CD by a regular CD player and will not be played. For further details, refer to the Instruction Manual of the CD recorder.

* TOC stands for table of contents which consists of the total number of tracks on a disc, the total play time and other data.

- Playable discs include only those discs recorded in the CD-DA format for music applications. Do not attempt to play CD-ROMs for personal computers and other discs on which data has been recorded.

- Since some of the player's settings are changed when a CD-RW disc is played, it may take a little longer to read the TOC than a music CD or CD-R disc.

- "CD-RW" appears on the display when a CD-RW disc is recognized.



This lights.

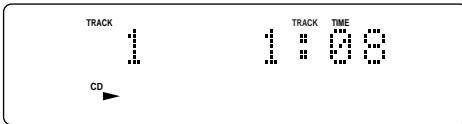
- In some cases, due to compatibility issues, it may not be possible to play a CD-R(W) disc that has been finalized. (This problem frequently occurs when material that was recorded at 2x is played back and recorded at 2x yet again.)

CD PLAY

- Press the **⏻** button **①/1** to switch on the power.
* The CD110's power will also be switched on if the SR110 is connected to the **REMOTE CONTROL** jack and the SR110's power is on.
- Press the **OPEN** button **⑤** to open the panel.



- Press the **▲** button **⑥**.
The disc tray is now extended so place the disc on the tray with its label surface facing up.
- Press the **▲** button **⑥**.
- Press the **▶/⏸** button **④** on the main unit or the **▶** button **⑩** on the remote control unit. If track 1 has been playing for 1 minute and 8 seconds, for instance, the following will appear on the main display during play.



Play stops automatically when the last track has been played.

TO PLAY THE DISC AGAIN STARTING FROM THE FIRST TRACK

Press the **▶/⏸** button **④** on the main unit or the **▶** button **⑩** on the remote control unit.

TO STOP PLAY

Press the **■** button **⑫/2**.

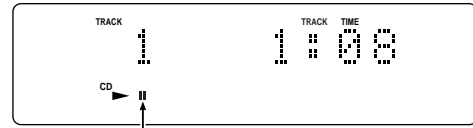
TO REMOVE THE DISC

Press the **▲** button **⑥** to open the disc tray, remove the disc, and press the button again to close the disc tray. Keep the disc tray closed without fail when the unit is not going to be used.

TO TEMPORARILY STOP PLAY

Press the **▶/⏸** button **④** on the main unit or the **⏸** button **⑭** on the remote control unit.

The pause indicator (**⏸**) lights, and the disc play is temporarily stopped where the button was pressed.



This lights.

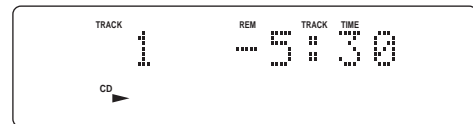
To resume play, press the **▶/⏸** button **④** on the main unit or the **▶** **⑩** or **⏸** **⑭** button on the remote control unit.

TO SWITCH THE TIME DISPLAY

Press the DISPLAY button during play. Each time this button is pressed, the display changes in sequence from "elapsed track time" to "remaining track time" to "total remaining time" to "clock display" (when the unit is used on its own) to "elapsed track time."

● Remaining track time

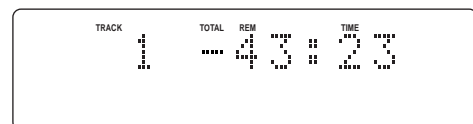
(Remaining play time from the part of the track now playing to the end of the same track)



When playing a disc that contains more than 30 tracks, the "--:--" will be displayed as the remaining track time for track 31 and subsequent tracks.

● Total remaining time

(Remaining play time from the part of the track now playing to the end of the last track on the disc)



SEARCHING/SKIPPING

DIRECT SEARCH (SPECIFYING THE NUMBER OF A DESIRED TRACK AND PLAYING IT)

- Specify the track number using the numeric buttons (0 to 9).
Track 3 : Press numeric button "3."
Track 12 : Press numeric button "1" and then numeric button "2" within two seconds.
* This operation does not work with MP3 discs.
- Press the **▶/||** button **[4]** on the main unit or the **▶** button **[10]** on the remote control unit.

TRACK SKIPPING (◀◀, ▶▶)

TO HEAR ONE OF THE TRACKS AFTER THE ONE NOW PLAYING

Press the **▶▶/▶▶|** button **[8]** on the main unit or the **▶▶|** button **[11]** on the remote control unit for the same number of times as the number of tracks to be skipped.

TO HEAR ONE OF THE TRACKS PRECEDING THE ONE NOW PLAYING

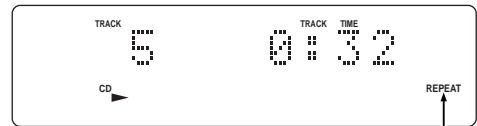
Press the **◀◀/◀◀|** button **[8]** on the main unit or the **◀◀|** button **[11]** on the remote control unit for the same number of times as the number of tracks to be skipped.

* When the **◀◀/◀◀|** button **[8]** or **▶▶/▶▶|** button **[8]** on the main unit is held down for more than one second, the track now playing is searched in the reverse or forward direction.

REPEAT PLAY

1-TRACK REPEAT (REPEATED PLAYBACK OF ONE TRACK ONLY)

Press the **REPEAT** button **[6/10]** once while the track you want to repeat is playing.
The "REPEAT" indicator lights, and the track is played repeatedly.



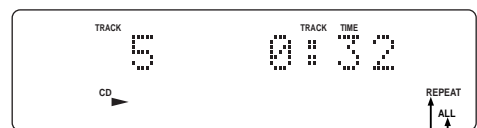
This lights.

TO RETURN TO NORMAL PLAY

Press the **REPEAT** button **[6/10]** twice. The "REPEAT" indicator goes off, the repeat mode is cleared, and normal play is restored.

ALL TRACK REPEAT (REPEATED PLAYBACK OF ALL TRACKS ON THE DISC)

When the **REPEAT** button **[6/10]** is pressed twice, the "REPEAT" and "ALL" indicators light, and all the tracks are played repeatedly.



These light.

TO RETURN TO NORMAL PLAY

Press the **REPEAT** button **[6/10]** once. The "REPEAT" and "ALL" indicators go off, the repeat mode is cleared, and normal play is restored.

* When all track repeat is selected after programming, only the tracks selected will be played repeatedly.

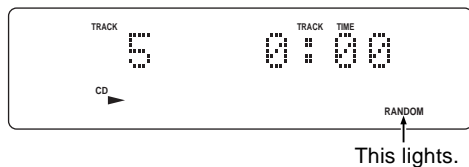
The all track repeat mode remains established at all times with MP3 discs. The "ALL" indicator does not light in this case. Only 1-track repeat can be selected.

Note:

If the **RANDOM** **[7]** or **AMS** **[4]** button is pressed during repeat play, the repeat play setting is cancelled.

RANDOM PLAY

When the **RANDOM** button ⑦ is pressed during play or stop, the unit automatically rearranges the sequence of the tracks and plays all the tracks in the resulting random order. This lights.



* If the **RANDOM** button ⑦ is pressed with a disc placed on the disc tray while the tray is open, the disc tray will close and random play will begin.

TO STOP RANDOM PLAY AND RETURN TO NORMAL PLAY

Press the **RANDOM** button ⑦ again.

TO MOVE TO THE NEXT TRACK IN THE RANDOM SEQUENCE

Press the **▶▶/▶▶|** button ⑧ on the main unit or **▶▶** button ⑪ on the remote control unit.

Each time one of these buttons is pressed, operation moves to the next track in the random sequence and starts playing it.

TO SEARCH FOR A SECTION OF THE TRACK NOW PLAYING

During random play, either hold down the **◀◀/◀◀** or **▶▶/▶▶** button ⑧ on the main unit for at least 1 second or hold down the **◀◀** or **▶▶** button ⑬ on the remote control unit.

The search operation will not move to a track before or after the track now playing.

TO REPEAT RANDOM PLAY

Press the **REPEAT** button ⑥/⑩ twice. The "REPEAT" and "ALL" indicators light on the display, and the same tracks are played repeatedly each time in a different random order.

* If the **AMS** button ④ is pressed during random play, the random play setting is cancelled.

Note

If the **RANDOM** button ⑦ is pressed when an MP3 disc is being played, the "RANDOM" indicator lights and random play applies only to the files in the directory that is being played back.

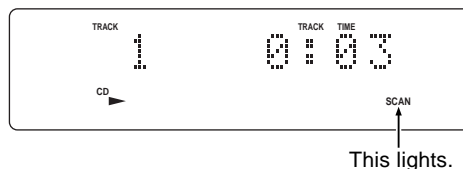
If the "RANDOM" and "ALL" indicators light, random play applies to the files in all the directories.

AMS PLAY

When the **AMS** button ④ is pressed with a regular CD in the stop mode, the "SCAN" indicator lights, and the first ten seconds of each track on the disc starting from the first track are played in succession.

If the **AMS** button ④ is pressed during play, the first ten seconds of each track on the disc starting from the track now playing are played in succession.

This function comes in handy for finding particular tracks to be played.



Once the track to be played has been found, press the **AMS** button ④ again. The "SCAN" indicator goes off, and all the tracks starting with the located track are played in the normal play mode.

* If the **RANDOM** button ⑦ is pressed during AMS play, the AMS play setting is cancelled.

Note

If the **AMS** button ④ is pressed when an MP3 disc is being played, the "AMS" indicator lights and AMS play applies only to the files in the directory that is being played back.

If the "AMS" and "ALL" indicators light, AMS play applies to the files in all the directories.

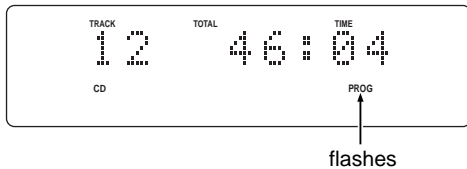
PROGRAM PLAY

LISTENING TO FAVORITE TRACKS IN A FAVORITE ORDER

This function cannot be used with MP3 discs.

- Random play cannot be used with program play.
- AMS cannot be used with program play.

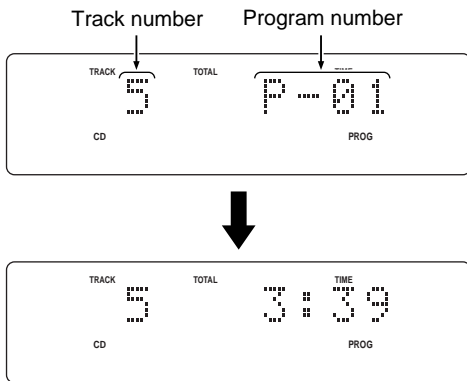
1. When the **PROG.** button **15** is pressed in the stop mode, the "PROG" indicator flashes, and the program mode is established.



2. Select the tracks to be programmed using the numeric buttons or **◀◀** and **▶▶** buttons **11** on the remote control unit. (They can also be selected using the **◀◀/◀◀** and **▶▶/▶▶** buttons **8** on the main unit.)
When the tracks are to be selected using the **◀◀** and **▶▶** buttons **11** on the remote control unit (or **◀◀/◀◀** and **▶▶/▶▶** buttons **8** on the main unit), first select the tracks, and then press the **PROG.** button **15**.

* To input a 2-digit track number to select a track using the numeric buttons, first input the 10's digit and, within 2 seconds, input the 1's digit.

(Example: When selecting track number 5 as the first track and its play time is 3 min. 39 sec.)



3. Then, repeat step 2 for the next track and so on to program up to 30 tracks.
4. Upon completion of all the programming, press the **▶** button **10**.
The selected tracks are now played in the programmed order.

Note:

- If track 31 or higher is included in a program, the time display will read "--:--" from that point on.
- If the program total time exceeds 99 minutes, the time display will read "--:--".

TO CHECK THE PROGRAM CONTENTS

Press the **PROG.** button **15** during programming. Each time this button is pressed, the tracks will be displayed one after the other in the sequence in which they were programmed.

TO CLEAR A PROGRAMMED TRACK

Press the **CANCEL** button **16** during programming. Each time this button is pressed, the tracks will be deleted one at a time in sequence starting with the one programmed last.

TO CLEAR THE ENTIRE PROGRAM

To clear the entire program, either press the **▲** button **6** on the main unit, or else press the **CANCEL** button **16** on the remote control unit three times.

TO ADD TO THE PROGRAM

Select the track or tracks to be added using the numeric buttons or the **◀◀** and **▶▶** buttons **11** on the remote control unit (or **◀◀/◀◀** and **▶▶/▶▶** buttons **8** on the main unit) while the unit is in the stop mode (while "PROG" is lighted) when there is room for more tracks in the program.

To select a track using the **◀◀** and **▶▶** buttons **11** on the remote control unit (or **◀◀/◀◀** and **▶▶/▶▶** buttons **8** on the main unit), first select the track, and then press the **PROG.** button **15**.

- The newly added track is added to the end of the program.
- If, when using the numeric buttons to select tracks 1 through 9 on a disc with 10 or more tracks in total, track number 3 is to be selected after track number 1, for example, first press the numeric button "1" and then wait at least 2 seconds before pressing "3."
- When selecting track number 10 or higher such as track number 13, first press the numeric button "1" and then press "3" before allowing 2 seconds to elapse.
- When using the **◀◀** and **▶▶** buttons **11** on the remote control unit (or **◀◀/◀◀** and **▶▶/▶▶** buttons **8** on the main unit) for programming, first select the number of the desired track, and then press the **PROG.** button **15** to enter it.

REPEAT DURING PROGRAM PLAY


If all track repeat is selected, all of the tracks in the program are repeated, not all of the tracks on the disc.

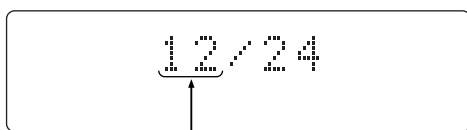
USING THE TIMER FUNCTIONS

This unit enables a time to be set and for a disc to be played at this setting. The clock must always be set for the timer functions to be valid.









* These functions work only when the unit is used on its own. The SR110's timer functions are used when the unit is operating as part of a system with the SR110.

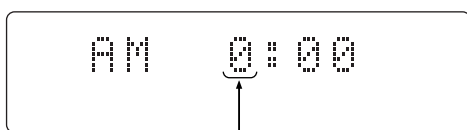
SETTING THE TIME

1. Press the **TIMER** button  on the remote control unit for at least 3 seconds. "12/24" now appears on the display, and "12" starts flashing.











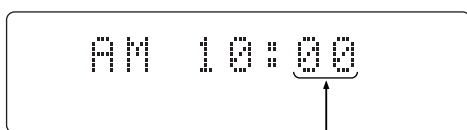
This flashes.

2. Select the 12-hour or 24-hour time display using the  and  buttons  on the remote control unit or the  and  buttons  on the main unit.
3. Press the  button  to enter the selection. The time now appears on the display, and the hour flashes. (Hour setting)











This flashes.

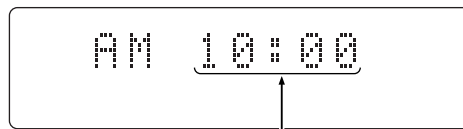
4. Set the current hour using the  and  buttons  on the remote control unit or the  and  buttons  on the main unit.
5. Press the  button  to enter the selection. The time now appears on the display, and the minute flashes. (Minute setting)



This flashes.

6. Set the current minutes using the  and  buttons  on the remote control unit or the  and  buttons  on the main unit.

7. Press the  button  to enter the selection. The time set on the display now flashes. (Second setting) This flashes.



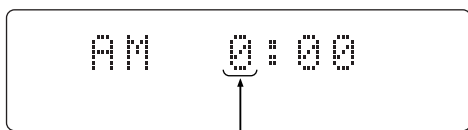
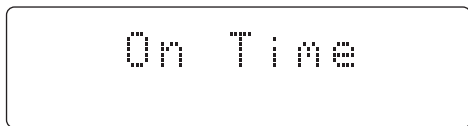
This flashes.

8. Finally when the stop button on the remote control unit is pressed, the time starts from 00 seconds. The entered time appears for 3 seconds, and then the original display is restored.

TIMER PLAYBACK

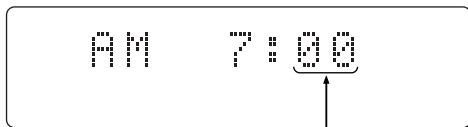
A CD can be played at a specific time by setting the playback time. The ON time and OFF time are set for timer playback.

1. Press the **TIMER** button ⑧ on the remote control unit once. On the display, "On Time" appears first followed by the time, and the hour flashes. (Playback ON hour setting)



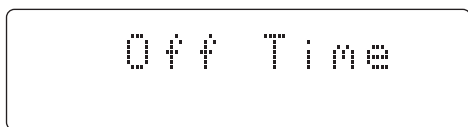
This flashes.

2. Set the playback ON hour using the ◀◀ and ▶▶ buttons ⑪ on the remote control unit or the ◀◀/◀◀ and ▶▶/▶▶ buttons ⑧ on the main unit.
3. Press the ■ button ⑫/⑫ to enter the selection. The hour input appears on the display, and the minute flashes. (Playback ON minute setting)

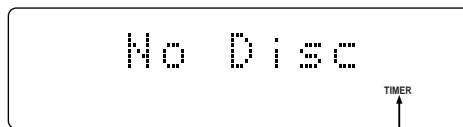


This flashes.

4. Set the playback ON minute using the ◀◀ and ▶▶ buttons ⑪ on the remote control unit or the ◀◀/◀◀ and ▶▶/▶▶ buttons ⑧ on the main unit.
5. Press the ■ button ⑫/⑫ to enter the selection. On the display, "Off Time" appears first followed by the time, and the hour flashes. (Playback OFF hour setting)



6. Next, the playback OFF time is set. Repeat steps 2 through 5 to set the hour and minute. Upon completion of the settings, the timer setting mode is cleared automatically.



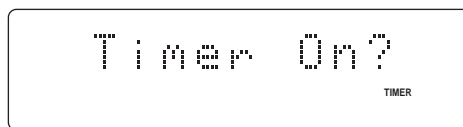
This lights.

7. Press the ▲ button ⑥ on the main unit to extend the disc tray, place the disc on the tray, and close the tray.
8. Set the ⏻ button ①/① on the unit to off. The button now lights up orange.

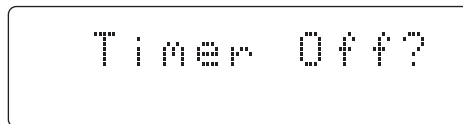
SETTING AND CLEARING TIMER PLAYBACK

1. Press the **TIMER** button ⑧ on the remote control unit twice. "Timer Off" or "Timer On" appears on the display.
2. Switch from "Timer On" and "Timer Off" or vice versa using the ◀◀ and ▶▶ buttons ⑪ on the remote control unit or the ◀◀/◀◀ and ▶▶/▶▶ buttons ⑧ on the main unit.

- Select "Timer On" to set timer playback.



- Select "Timer Off" to clear timer playback.



3. Press the ■ button ⑫/⑫ to enter the selection.

Important

Timer playback cannot be set if "No Disc", "Error Disc" or "Blank Disc (CD-R(W))" is displayed.

CONCERNING MP3

This unit is capable of playing MP3-CDs and CDR or CD-RW discs with MP3 files created by the user. For playing CDR or CD-RW discs with MP3 files, the ".mp3" extension is used to save the data created by the user in files. Other extensions such as ".doc," ".txt" and ".pdf" cannot be used. This unit is not capable of digitally recording MP3 files.

MP3 PLAYBACK

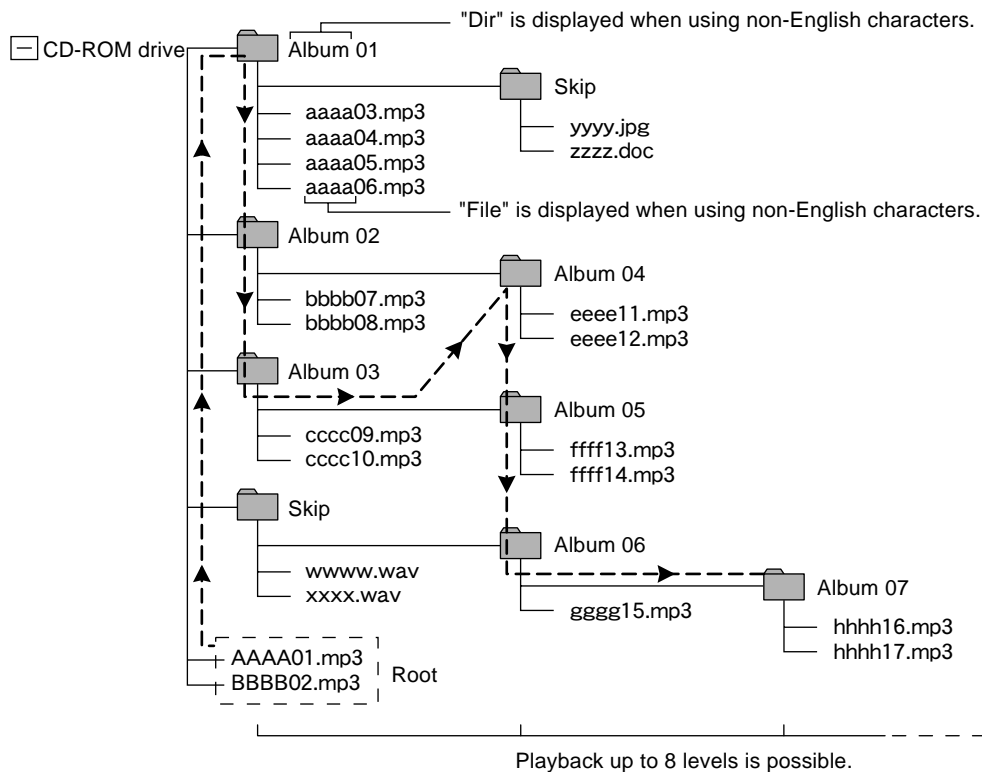
1. Press the button ①/1 to switch on the power.
 - * The CD110's power will also be switched on if the SR110 is connected to the remote control jack and the SR110's power is on.
2. Press the **OPEN** button ⑤ to open the panel.
3. Press the button ⑥. The disc tray is now extended so place the disc on the tray with its label surface facing up.
4. Press the button ⑥. Alternatively, push the front of the disc tray gently.
5. Press the button ④ on the main unit or the button ⑩ on the remote control unit. Playback commences in sequence from the first album. (See figure below) Press the button ⑩ again to play a track.

SELECTING ALBUMS

1. Select the desired album using the /⑧ and /⑨ buttons ⑧ on the main unit or the and buttons ⑪ on the remote control unit.
2. Press the button ④ on the main unit or the button ⑩ on the remote control unit. Playback now starts in sequence starting from the selected album. Press the button ⑩ again to play a track.

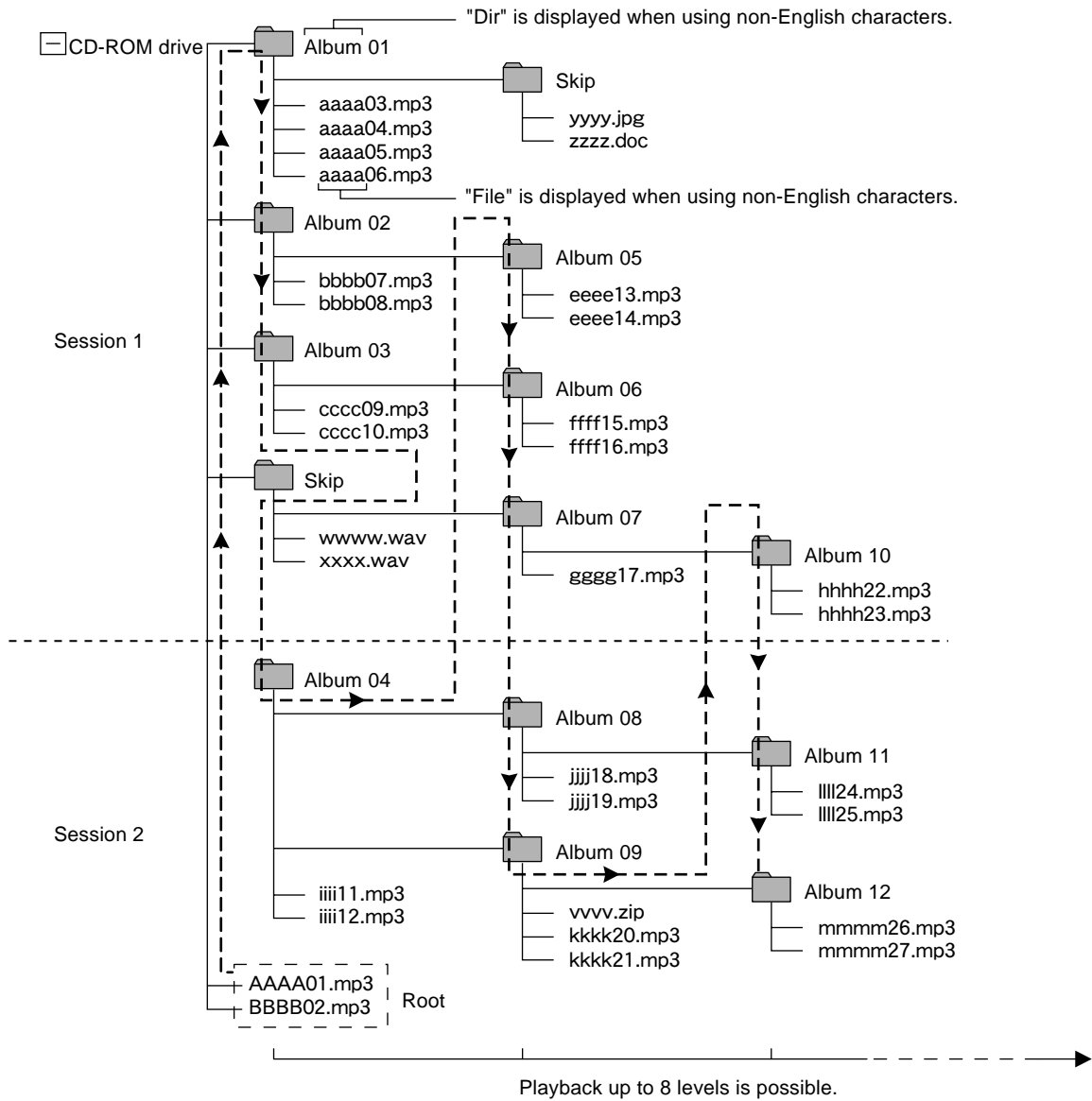
EXAMPLE OF PLAYBACK SEQUENCE

When there is just the one session
(Figure showing what is displayed by Windows Explorer)



- The dotted lines (- ->-) with arrows indicate the MP3 album and track playback sequence.
- Album 01 - album 07
In the example shown in the figure, the CD-ROM has seven MP3 albums.
- AAAA01.mp3 - mmmm17.mp3
In the example shown in the figure, the CD-ROM has 17 tracks: "01" is the first track and "17" is the last one.
- Only files with the ".mp3" extension are played: files with extensions such as ".wav," ".jpg" and ".doc" are skipped.

When there are multiple sessions
(Figure showing what is displayed by Windows Explorer)



- Even when there are multiple sessions, playback is still performed in hierarchical sequence starting from the top level.
- The dotted lines with arrows (- ->-) indicate the MP3 album and track playback sequence.
- Album 01 - album 012
 In the example shown in the figure, the CD-ROM has twelve MP3 albums.
- AAAA01.mp3 - mmmm27.mp3
 In the example shown in the figure, the CD-ROM has 27 tracks: "01" is the first track and "27" is the last one.
- Only files with the ".mp3" extension are played: files with extensions such as ".wav," ".jpg" and ".doc" are skipped.
- With the CD110 compact disc player, the playback sequence may differ from the one displayed on the PC screen as shown above. (It may also vary depending on the writing software program.)

TROUBLESHOOTING

If you believe that a malfunction has occurred, first check the points listed below. The problem may have been caused by a simple operational error or a connection problem. If the problem is not solved even after carrying out the following checks, consult your dealer or nearest Marantz sales office or service center.

The disc fails to rotate.

- Has the power cord been connected correctly?
- Is the unit's power ON?
- Has the disc been placed in the correct position?
- Has the disc been placed upside down on the tray? (Is the label side of the disc facing up?)
- Is the disc dirty?
- Is the disc scratched?
- Is the disc warped?

The disc rotates but no sound is heard.

- Have the amplifier and speaker been connected correctly?
- Is the amplifier's power ON?
- Has the amplifier's function or selector switch been set to "CD" or "AUX" (to the position corresponding to where you connected the CD110)?
- Is the amplifier's volume control at its lowest setting?

The disc stops rotating in mid-operation.

- Is the disc dirty?
- Is the disc scratched?
- Is the disc warped?

The sound breaks up or noise is heard.

- Is the disc dirty or scratched?
- Is the disc warped?
- Is the CD a music CD? (CD-ROMs for personal computers, DTS-CDs, etc. cannot be played.)

Remote control operation is not possible.

- Is the transmitter of the remote control unit (RC110CD) pointed correctly at the remote sensor of the CD player (CD110)? Are there any obstacles between these two windows?
- Have the batteries in the remote control unit (RC110CD) run down?
- Is there another source of strong light striking the remote sensor window of the CD player (CD110)?
- Is the REMOTE switch on the rear panel set to EXT.?

CD-R or CD-RW discs cannot be played.

- Has the disc been placed wrong side up on the tray?
- Has the finalizing work (TOC writing) been completed correctly?
- Is the format (CD-DA) for music used for the recorded information?

OPERATING PRECAUTIONS

- In the winter you may notice that condensation forms on the window of a well-heated room.

Condensation may also occur inside the CD player in the following situations:

- When the listening room is first heated.
- When the humidity in the room is high.
- When the unit is moved from a cold environment to a warm room.
- If condensation occurs, the number of tracks cannot be read and the CD player may not function properly. If this happens, leave the power ON and wait for about 30 minutes before operating the unit.
- The CD player may interfere with the reception of your tuner or TV set. If this occurs, place the CD player farther away from the tuner or TV.
- The CD player features very little noise compared to analog records, and the noise before actual playback begins is almost inaudible. Therefore, be careful not to set the volume control of the amplifier too high, otherwise other audio components such as the speakers may be damaged when actual playback starts.

CLEANING OF EXTERIOR SURFACES

With proper care and cleaning, the exterior finish of your equipment will last indefinitely. Never use scouring pads, steel wool, scouring powders or harsh chemical agents (e.g. lye solution), alcohol, thinners, benzene, insecticide or other volatile substances, as these will mar the finish of the cabinet. Likewise, never use cloths containing chemical substances. If the equipment becomes dirty, wipe the external surfaces with a soft, lint-free cloth.

If the cabinet becomes heavily soiled:

- dilute some washing-up liquid in water, in a ratio of one part detergent to six parts water;
- dip a soft, lint-free cloth in the solution and wring the cloth out until it is damp;
- wipe the equipment with the damp cloth;
- dry the equipment by wiping it with a dry cloth.

REPAIRS

Only the most competent and qualified service technicians should be allowed to service the equipment. The Marantz company and its factory-trained warranty station personnel have the knowledge and special facilities needed for the repair and calibration of this precision equipment. After the warranty period has expired, repairs will be performed for a charge if the equipment can be restored to normal operation.

In the event of difficulty, consult your dealer or write directly to the nearest location to you that is listed on the Marantz Authorized Service Station list. Please quote the model and serial number of the equipment and give a full description of what you think is abnormal about the equipment's behaviour.

TECHNICAL SPECIFICATIONS

AUDIO CHARACTERISTICS

Channels	2 channels
Frequency range	20Hz-20kHz
Dynamic range	> 90 dB
S/N ratio (WTD)	87 dB
Channel separation (1 kHz)	87 dB
THD (1 kHz)	0.02 %
Wow & flutter	Precision of quartz
Error correction	Cross-interleave read solomon code (CIRC)
Analog output	2.0 V RMS
Digital output (Coaxial)	0.5 Vp-p/75 ohms
Digital output (Optical)	-20 dBm

OPTICAL READOUT SYSTEM

Laser	GaAlAs semiconductor
Wavelength	780 nm

SIGNAL SYSTEM

Sampling frequency	44.1 kHz
Quantization	16-bit linear/channel

GENERAL

Power Supply	AC 120 V 60 Hz
Power Consumption	0.16 A
Dimensions (W · H · D)	8-1/4 · 2-3/4 · 12-3/16 inches (210 · 71.5 · 310 mm)
Net weight	6.8 lbs (3.1 kg)
Operating temperatures	+5 °C ~ +45 °C
Operating humidity	5 % ~ 90 % (without dew)

ACCESSORIES

Remote control unit (RC110CD)	1
Dimensions (W · H · D) MAX	2-1/2 · 7-3/4 · 1 inches (50.5 · 154.5 · 25 mm)
Weight	0.13 lbs (60 g)
AA type Batteries	2
Stereo audio cable	1 pair
Remote cable	1
Warranty Card (USA)	1
Warranty Card (CANADA)	1
User's Guide	1

Specifications subject to change without prior notice.

COUNTRY	COMPANY	ADDRESS
ALGERIE	Azur 2000	8, Lotissement Ben Hatadi, Alger, Algerie
ARMENIA	NGYIG Ltd.	47 A/75 St. Lalaianis, 375000 Yerevan, Armenia
AUSTRALIA	Jamo Australia Pty. Ltd.,	24 Lionel Road, Mt. Waverley, VIC 3149, Australia
AUSTRIA	Huber & Prohaska GmbH	Taborstraße 95 / Ladestraße 1, Gebäude Hangartner, A-1200 Wien, Austria
BAHREIN	Ambassador Stores	P.O. Box 237,141, Government Avenue, Manama,Bahrein
BANGLADESH	Target	1078, Ramjoy Moharja Lane Asadgonj, Chittagong 4000, Bangladesh
BELGIUM	Van der Heyden Audio N.V.	Brusselbaan 278, 9320 Eredebodegem, Belgium
BULGARIA	Ariescommerce GmbH	Makedonia Blvd. 16, 1606 Sofia, Bulgaria
CANADA	Lenbrook Industries Limited	633 Granite Court, Pickering, Ontario
CHINA	Guang Chang Audio International Co., Ltd.	No.38 Yushan Road, ShiQiao, Pan Yu, Guang Dong, China
CYPRUS	Empire Hifi systems Ltd.	P.O. Box 5604, Nicosia, Cyprus
CZECH REPUBLIC	Audio International	Sokolska 41, 67902 Rajecsko, OKR,Blansko, Czech Republic
DENMARK	Audio Nord	Dali Allé 1, 9610 Noerager, Denmark
DUBAI	V.V.& SONS	P.O. Box 105, Dubai, U.A.E.
EGYPT	Solimco	9, El Attibaa St. Doki, Cairo, Egypt
ESTONIA	HiFi Club Estonia	Ehte 4, 90503 Haapsalu, Estonia
F.Y.R.O.M.	T.P. KODI	ul.Cedomir Kantargiev 21a, Skopje, Former Yugoslavian Republic of Macedonia
FINLAND	Audio Nord	Uudenmaankatu 4-6, Helsinki SF-00120, Finland
FRANCE	Marantz France	A division of Marantz Europe B.V., P.O. Box 301, 92 156 Suresnes Cedex, France
GERMANY	Marantz Deutschland	Hakenbusch 3, 49078 Osnabrück, Germany
GREECE	Adamco S.A.	188, Hippocratous Street, 11471 Athens, Greece
HEADQUARTERS EUROPE:	Marantz Europe B.V.	Building SFF-2, P.O. Box 80002, 5600 JB Eindhoven, The Netherlands
HONG KONG	Marantz Asia Ltd.	Unit 1706, Metroplaza II, 223 Hing Fong Road, Kwai Fong, N.T., Kowloon, Hong Kong
HUNGARY	Infovox Ltd.	Terez Krt.31, 1067 Budapest, Hungary
ICELAND	ID Electronics Ltd.	Armula 38, 108 Reykjavik, Iceland
INDIA	NOVA Audio Private	8,Punam Co-op.Society 29/30 Road#5, Union Park MUMBAI 400052, India
IRAN	Home Co.	5th floor no 878 Philips Building Enghelab ave, P.O. 11365/7844 Tehran, Iran
IRELAND	Marantz Ireland	Clonskeagh, Dublin 14, Ireland
ISRAEL	Elmor Ltd.	52 Heh Beiyar Street, Kikar Hamedina, Tel Aviv, Israel
ITALY	Marantz Italy	Via Casati 23, 20052 Monza (Milano), Italy, Servizio Consumatori 1678-20026, Numero Verde
IVORY COAST	Hifivoir	B.P. 2428, Abidjan 01, Ivory Coast
JAPAN	Marantz Japan Inc.	35-1 Sagami Ohno 7-Chome, Sagamihara-shi, Kanagawa 228-8505, Japan
KOREA	Mk Enterprises Ltd.	121-210, 2F Shinhan Bldg., 247-17 Seokyo-dong, Mapo-ku, Seoul, Korea
KUWAIT	alAlamiah Electronics Intl.	P.O. Box 8196, Salmiah 22052, Kuwait
LATVIA	Ace Ltd.	61, LacPlesa Str., Riga LV 1011, Latvia
LEBANON	AZ Electronics S.A., 1,	P.O. Box 11 2833, Beirut, Lebanon
LITHUANIA	Accapella Ltd.	Ausros, Vartu G/5, Pasazo SKG., 2001 Vilnius, Lithuania
MALAYSIA	Wo Kee Hong Electronics Sdn. Bhd.	102 Jalan SS 21/35, Damansara Utama, 47400 Petaling Jaya, Selangordarul Ehsan, Malaysia
MALTA	Doneo Co Ltd.	78 The Strand, Sliema SLM07, Malta
MAURITIUS	SKR Electronics Ltd.	P.O. Box 685, Bell Village, Port Louis, Mauritius
MILITARY MARKET EUROPE	PASCO GmbH	PO BOX 1280, Sandhausen 69200, Germany
NETHERLANDS	Marantz Domestic Sales	A division of Marantz Europe B.V., Building SFF2, P.O. Box 80002, 5600 JB Eindhoven, The Netherlands
NEW ZEALAND	Wildash Audio Systems	14 Malvern Road, Mt. Albert, Auckland, New Zealand
NORWAY	Audio Nord	Sandkerveien 64, Oslo 0483, Norway
OMAN	Mustafa & Jawad Trading CO.	P.O. Box 1918, Ruwi, Oman
POLAND	Philips Polska Sp. z.o.o.	Al.Jerozolimskie 195b, 02 222 Warszawa, Poland
PORTUGAL	Corel2	Comércio de Electrónica Lda., Av. Luis Bivar, No 85 A, 1050 Lisboa, Portugal
PROFESSIONAL EUROPE	Marantz Professional Products	Kingsbridge House, Padbury Oaks, 575-583 Bath Road, Longford, Middlesex UB7 0EH, U.K.
PROFESSIONAL U.S.A.	Marantz Professional Products	Distributed by: Superscope Technologies Inc., 1000 Corporate Blvd. Ste.D, Aurora, Illino
QATAR	Almana & Partners W.W.L.	P.O. Box 49, Doha, Qatar
REUNION	Vision +	180 Rue du Marechal Leclerc, 97400 Saint Denis, Ile de la Reunion
ROMANIA	Nova Music Entertainment	5, Zagazului Str. Bl.1G,apt.18, sector 1,Bucharest, Romania
RUSSIA	Absolute Audio	7/2, Montazhnaya Street, 107497 Moscow, Russia
SAUDI ARABIA	Adawlia Univ. Electr. Apl	P.O. Box 2154, Alkhobar 31952, Saudi Arabia
SINGAPORE	Forward Marketing (S) Pte. Ltd.	Wo Kee Hong Centre, 29 Leng Kee Road, Singapore 159099, Singapore
SLOVAKIA	Bis Audio s.r.o.	Nam. SNP 10, 96001 Zvolem, Slovakia
SLOVENIA	Bofex	Smartinska 152, HALA V/3, 61000 Ljubljana, Slovenia
SOUTH AFRICA	Coherent Imports (PTY) Ltd.	P.O. Box 1614, Alberton, 1450, South Africa
SPAIN	Marantz Spain	Martinez Villergas 2, Apartado 2065, Madrid 28027, Spain
SRI LANKA	The listening Room	Mezzanine Floor, The Landmark 385, Galle Road, Colombo - 3, Sri Lanka
SWEDEN	Audio Nord	Almedalsvagen 4, Gotenborg 402-23, Sweden
SWITZERLAND	Sound Company AG	Postfach, 8010 Zürich, Switzerland
SYRIA	Hamzeh & Partners	Hafez Ibrahim Str. No 117, Damascus Shalan, Syria
TAHITI	Covecolor	Av. Prince Hinoi, Cours de l'union sacré, P.O. Box 2334, Papeete, Tahiti
TAIWAN	Pai-Yuing Co. Ltd.	6th No 148 Sung Kiang Road, Taipei 10429, Taiwan R.O.C.
THAILAND	MRZ Standard Co. Ltd.	746-750 Mahachai Road, Wangburapa, Bangkok 10200, Thailand
TUNESIA	Societe EDEVIG	40, Avenue du Golfe Arabe, El Menzah, 1004, Tunesia
TURKEY	Türk Philips Ticaret A.S.	Yukari Dudullu Organize sanayi Bolgesi, 2.Cadde no.28, 81260 Umraniye-Istanbul, Turkey
U.K.	Marantz Hifi UK Ltd.	Kingsbridge House, Padbury Oaks, 575-583 Bath Road, Longford, Middlesex UB7 0EH, U.K.
U.S.A.	Marantz America Inc.	440 Medinah Road, Roselle, IL 60172, U.S.A.
YUGOSLAVIA	ITM Company	Omladinskih Brigada 86, 11070 Belgrade, Yugoslavia
EXPORT	Marantz Domestic Sales	A division of Marantz Europe BV,Building SFF2, P.O. Box 80002, 5600 JB Eindhoven, The Netherlands

www.marantz.com

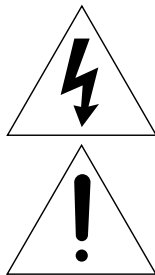
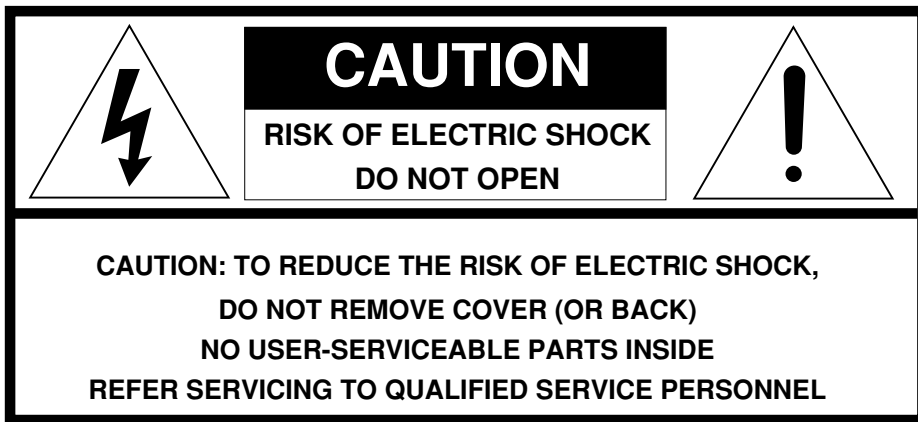
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marantz®

Model SR110 User Guide

Receiver



The lightning flash with arrowhead symbol, within an equilateral triangle, is intended to alert the user to the presence of uninsulated “dangerous voltage” within the product’s enclosure that may be of sufficient magnitude to constitute a risk of electric shock to persons.

The exclamation point within an equilateral triangle is intended to alert the user to the presence of important operating and maintenance (servicing) instructions in the literature accompanying the appliance.

WARNING

**TO REDUCE THE RISK OF FIRE OR ELECTRIC SHOCK,
DO NOT EXPOSE THIS APPLIANCE TO RAIN OR MOISTURE.**

**CAUTION: TO PREVENT ELECTRIC SHOCK, MATCH WIDE BLADE OF
PLUG TO WIDE SLOT, FULLY INSERT.**

**ATTENTION: POUR ÉVITER LES CHOCS ÉLECTRIQUES,
INTRODUIRE LA LAME LA PLUS LARGE DE LA FICHE DANS LA
BORNE CORRESPONDANTE DE LA PRISE ET POUSSER
JUSQU’AU FOND.**

NOTE TO CATV SYSTEM INSTALLER:

This reminder is provided to call the CATV (Cable-TV) system installer’s attention to Article 820-40 of the NEC, that provides guidelines for proper grounding and, in particular, specified that the cable ground shall be connected to the grounding system of the building, as close to the point of cable entry as practical.

NOTE:

This equipment has been tested and found to comply with the limits for a Class B digital device, pursuant to Part 15 of the FCC Rules. These limits are designed to provide reasonable protection against harmful interference in a residential installation. This equipment generates, uses and can radiate radio frequency energy and, if not installed and used in accordance with the instructions, may cause harmful interference to radio communications. However, there is no guarantee that interference will not occur in a particular installation. If this equipment does cause harmful interference to radio or television reception, which can be determined by tuning the equipment off and on, the user is encouraged to try to correct the

interference by one or more of the following measures:

- Reorient or relocate the receiving antenna.
- Increase the separation between the equipment and receiver.
- Connect the equipment into an outlet on a circuit different from that to which the receiver is connected.
- Consult the dealer or an experienced radio/TV technician for help.

NOTE:

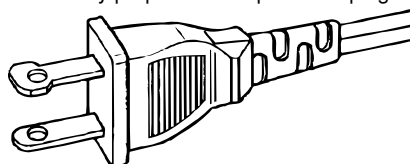
Changes or modifications may cause this unit to fail to comply with Part 15 of the FCC Rules and may

IMPORTANT SAFETY INSTRUCTIONS

READ BEFORE OPERATING EQUIPMENT

This product was designed and manufactured to meet strict quality and safety standards. There are, however, some installation and operation precautions which you should be particularly aware of.

1. Read Instructions - All the safety and operating instructions should be read before the appliance is operated.
2. Retain Instructions-The safety and operating instructions should be retained for future reference.
3. Heed Warnings-All warnings on the appliance and in the operating instructions should be adhered to.
4. Follow Instructions-All operating and use instructions should be followed.
5. Cleaning-Unplug this video product from the wall outlet before cleaning. Do not use liquid cleaners or aerosol cleaners. Use a damp cloth for cleaning.
6. Attachments-Do not use attachments not recommended by the video product manufacturer as they may cause hazards.
7. Water and Moisture-Do not use this video product near water-for example, near a bath tub, wash bowl, kitchen sink, or laundry tub, in a wet basement, or near a swimming pool, and the like.
8. Accessories-Do not place this video product on an unstable cart, stand, tripod, bracket, or table. The video product may fall, causing serious injury to a child or adult, and serious damage to the appliance. Use only with a cart, stand, tripod, bracket, or table recommended by the manufacturer, or sold with the video product. Any mounting of the appliance should follow the manufacturer's instructions, and should use a mounting accessory recommended by the manufacturer.
9. Ventilation-Slots and openings in the cabinet are provided for ventilation and to ensure reliable operation of the video product and to protect it from overheating, and these openings must not be blocked or covered. The openings should never be blocked by placing the video product on a bed, sofa, rug, or other similar surface. This video product should never be placed near or over a radiator or heat register. This video product should not be placed in a built-in installation such as a bookcase or rack unless proper ventilation is provided or the manufacturer's instructions have been adhered to.
10. Power Sources-This video product should be operated only from the type of power source indicated on the marking label. If you are not sure of the type of power supply to your home, consult your appliance dealer or local power company. For video products intended to operate from battery power, or other sources, refer to the operating instructions.
11. Grounding or Polarization-This video product is equipped with a polarized alternating-current line plug (a plug having one blade wider than the other). This plug will fit into the power outlet only one way. This is a safety feature. If you are unable to insert the plug fully into the outlet, try reversing the plug. If the plug should still fail to fit, contact your electrician to replace your obsolete outlet. Do not defeat the safety purpose of the polarized plug.



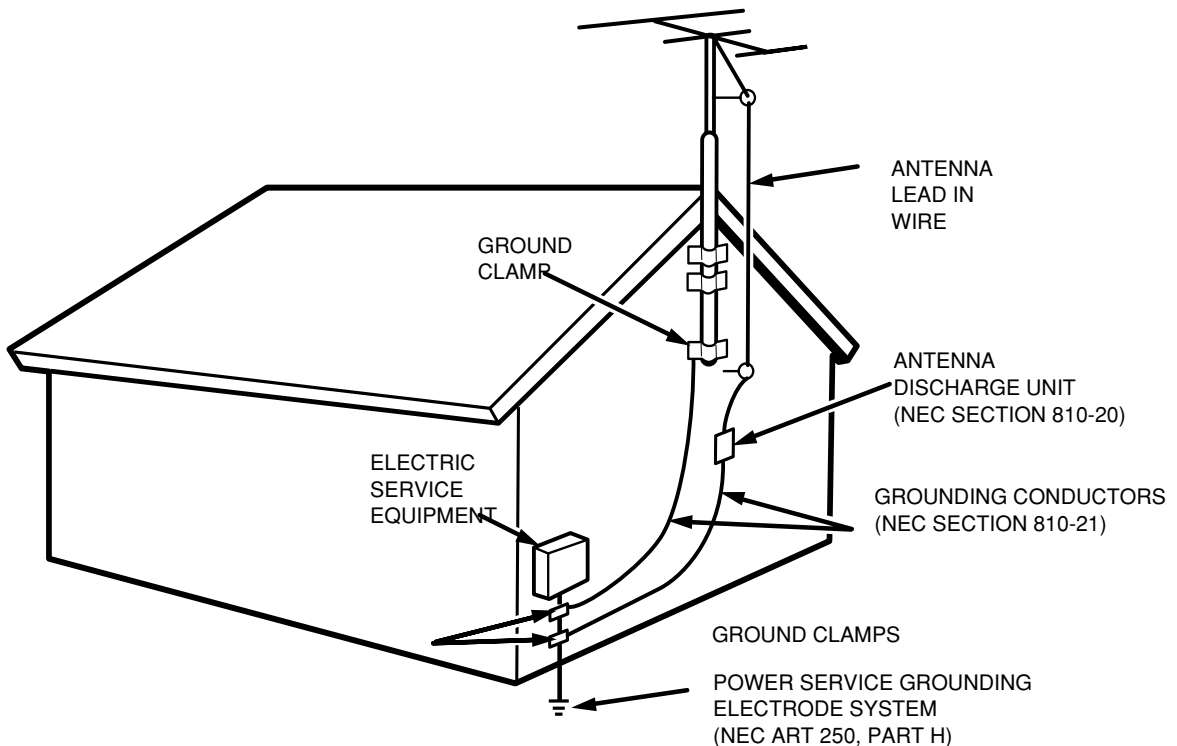
AC POLARIZED PLUG

12. Power-Cord Protection-Power-supply cords should be routed so that they are not likely to be walked on or pinched by items placed upon or against them, paying particular attention to cords at plugs, convenience receptacles, and the point where they exit from the appliance.
13. Protective Attachment Plug - The appliance is equipped with an attachment plug having overload protection. This is a safety feature. See Instruction Manual for replacement or resetting of protective device. If replacement of the plug is required, be sure the service technician has used a replacement plug specified by the manufacturer that has the same overload protection as the original plug.
14. Outdoor Antenna Grounding-If an outside antenna or cable system is connected to the video product, be sure the antenna or cable system is grounded so as to provide some protection against voltage surges and built up static charges. Section 810 of the National Electrical Code, ANSI/NFPA No. 70-1984, provides information with respect to proper grounding of the mast and supporting structure, grounding of the lead-in wire to an antenna discharge unit, size of grounding conductors, location of antenna-discharge unit, connection to grounding electrodes, and requirements for the grounding electrode. See Figure 1.
15. Lightning-For added protection for this video product receiver during a lightning storm, or when it is left unattended and unused for long periods of time, unplug it from the wall outlet and disconnect the antenna or cable system. This will prevent damage to the video product due to lightning and power-line surges.
16. Power Lines-An outside antenna system should not be located in the vicinity of overhead power lines or other electric light or power circuits, or where it can fall into such power lines or circuits. When installing an outside antenna system, extreme care should be taken to keep from touching such power lines or circuits as contact with them might be fatal.
17. Overloading-Do not overload wall outlets and extension cords as this can result in a risk of fire or electric shock.

18. Object and Liquid Entry-Never push objects of any kind into this video product through openings as they may touch dangerous voltage points or short-out parts that could result in a fire or electric shock. Never spill liquid of any kind on the video product.
19. Servicing-Do not attempt to service this video product yourself as opening or removing covers may expose you to dangerous voltage or other hazards. Refer all servicing to qualified service personnel.
20. Damage Requiring Service-Unplug this video product from the wall outlet and refer servicing to qualified service personnel under the following conditions:
 - a. When the power-supply cord or plug is damaged.
 - b. If liquid has been spilled, or objects have fallen into the video product.
 - c. If the video product has been exposed to rain or water.
 - d. If the video product does not operate normally by following the operating instructions. Adjust only those controls that are covered by the operating instructions as an improper adjustment of other controls may result in damage and will often require extensive work by a qualified technician to restore the video product to its normal operation.
 - e. If the video product has been dropped or the cabinet has been damaged.
- f. When the video product exhibits a distinct change in performance-this indicates a need for service.
21. Replacement Parts-When replacement parts are required, be sure the service technician has used replacement parts specified by the manufacturer or have the same characteristics as the original part. Unauthorized substitutions may result in fire, electric shock or other hazards.
22. Safety Check-Upon completion of any service or repairs to this video product, ask the service technician to perform safety checks to determine that the video product is in proper operating condition.
23. Carts and Stands-The appliance should be used only with a cart or stand that is recommended by the manufacturer.
24. An appliance and cart combination should be moved with care. Quick stops, excessive force, and uneven surfaces may cause the appliance and cart combination to overturn.



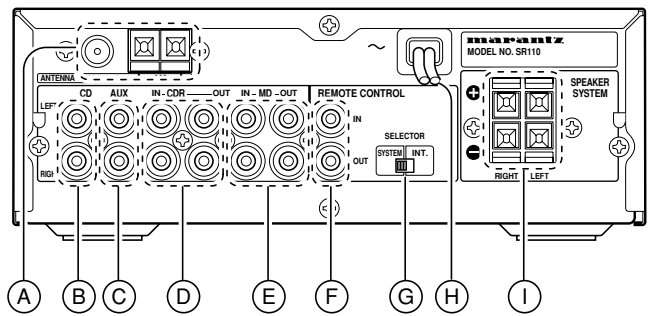
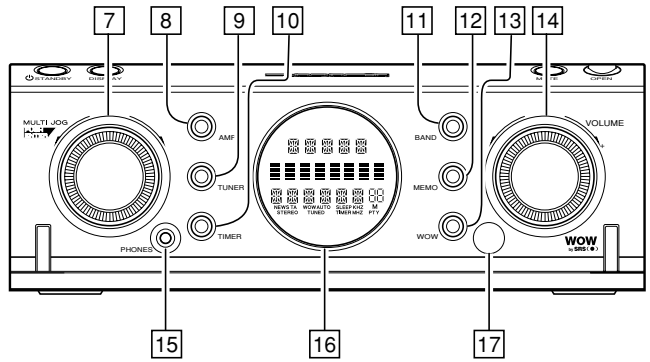
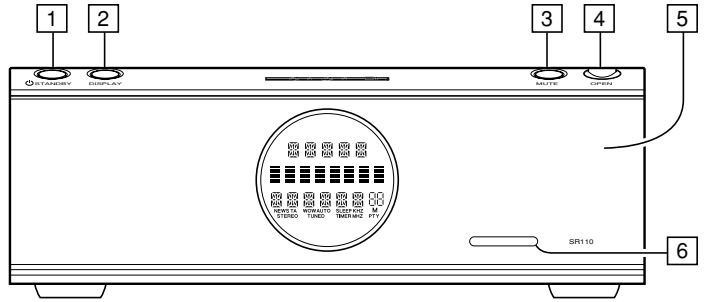
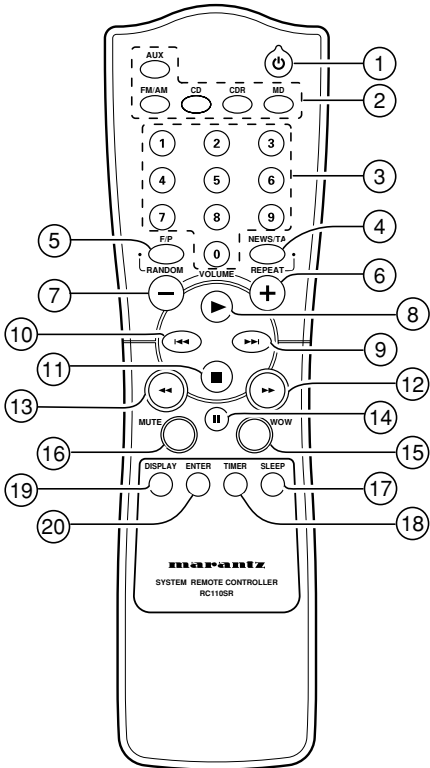
FIGURE 1
EXAMPLE OF ANTENNA GROUNDING ACCORDING TO
NATIONAL ELECTRICAL CODE INSTRUCTIONS
CONTAINED IN ARTICLE 810 - "RADIO AND TELEVISION EQUIPMENT"



NEC - NATIONAL ELECTRICAL CODE

This Class B digital apparatus meets all requirements of the Canadian Interference - Cansing Equipment Regulations.

Cet appareil numérique de la Classe B respecte toutes les exigences du Règlement sur le matériel brouilleur du Canada.



FOREWORD

This section must be read before any connection is made to the mains supply.

WARNINGS

Do not expose the equipment to rain or moisture.
Do not remove the cover from the equipment.
Do not push anything inside the equipment through the ventilation holes.
Do not handle the mains lead with wet hands.

EQUIPMENT MAINS WORKING SETTING

Your Marantz product has been prepared to comply with the household power and safety requirements that exist in your area.

SR110 can be powered by 120 V AC only.

PRECAUTIONS

The following precautions should be taken when operating the equipment.

GENERAL PRECAUTIONS

When siting the equipment ensure that:

- the ventilation holes are not covered;
- air is allowed to circulate freely around the equipment
- it is on a vibration free-surface;
- it will not be exposed to interference from an external source;
- it will not be exposed to excessive heat, cold, moisture or dust;
- it will not be exposed to direct sunlight;
- it will not be exposed to electrostatic discharges

Never place heavy objects on the equipment.

If a foreign body or water does enter the equipment, contact your nearest dealer or service centre.

Do not pull out the plug by pulling on the mains lead, hold the plug.

It is advisable when leaving the house, or during a thunderstorm, to disconnect the equipment from the mains supply.

FEATURES

- Easy operation with remote control bus in SYSTEM mode operation
- High power output of the discrete configuration possesses a high level of reliability.
- 30-Station random preset tuner
- System operation switch

This unit can be operated as a system component in combination with the CD, CD-R and MD players from the Marantz AV system.

- Program Timer/Sleep Timer

ABOUT THE WOW

WOW is a proprietary new algorithm from SRS Labs, which processes a stereo signal to provide extraordinary enhancement to the listening experience. Ordinary stereo present a rather limited spatial presentation, and often lack-luster bass (low frequency) performance. Any sound system including smaller multimedia speakers, headphones, mini stereos, portable "boom boxes" or televisions can deliver an audio performance with dramatically improved image size, dynamics and immersion when playing a signal processed with WOW. The procession of the spatial cues surrounds the listener with a holographic representation of the performance. In addition, TruBass builds upon WOW by providing bass that is deep, rich and controlled, through means that don't require a large speaker or cabinet.

CONTROL BUTTON ON THE REMOTE CONTROL UNIT

① Power switch

Press this switch to turn the power of the unit ON. If components of Marantz AV system are connected through the REMOTE CONTROL bus, this will turn these components ON. Press this switch again to turn the unit OFF, and the unit enters standby mode.

② Function buttons

There are FM/AM, CD, CD-R, MD and AUX buttons. These buttons are used to select the source to be played or recorded. To switch the input selector of the receiver, press the button.

Function button control on the remote	Source to be played
FM/AM	FM or AM
CD	CD player (CD110)
CD-R	CD Recorder
MD	MD deck
AUX	AUX (TV game, etc.)

③ Numeric (ten keypad) button

These buttons are used to select the preset memory when FM/AM function is selected.

These buttons are used to enter the track or program number when CD or CD-R function is selected.

④ NEWS/TA / REPEAT button

This button is used to repeat the disc, tracks or programme when CD, CD-R or MD function is selected.

⑤ F/P / RANDOM button

This button is used to display the frequency or preset channel. This button is used to random play when CD, CD-R or MD function is selected.

⑥⑦ – VOLUME + button

These buttons are used to change the volume for listening. Press the + button to increase and the – button to decrease the volume.

⑧ ► (Play) button

This button is unavailable when FM/AM function is selected. This button is used to play the source disc when CD, CD-R or MD function is selected.

⑨ ►►| button

This button is used to increase the number on the tuner preset memory or advance to next track on CD, CD-R or MD.

⑩ |◀◀ button

This button is used to decrease the number on the tuner preset memory or return to previous tracks on CD, CD-R or MD.

⑪ ■ (Stop) button

This button is unavailable when FM/AM function is selected. This button is used to stop the source disc playing/recording when CD, CD-R or MD function is selected.

⑫ ►► button

This button is used to increase the frequency when FM/AM function is selected.

This button is used to search forward when CD, CD-R or MD function is selected.

⑬ ◀◀ button

This button is used to decrease the frequency when FM/AM function is selected.

This button is used to search backward when CD, CD-R or MD function is selected.

⑭ || (Pause) button

This button is unavailable when FM/AM function is selected. This button is used to interrupt the source disc playing/recording when CD, CD-R or MD function is selected.

⑮ WOW button

This button is used to change the WOW function level. Each press of this button change the WOW function level following order.

OFF → LOW → HIGH → OFF

Note:

When this button is pressed, the sound of speakers is muted momentarily. This is not malfunction.

⑯ MUTE button

This button is used to mute the sound from the speakers. When this button is pressed, the speakers' sound level is muted and "MUTE" appears on the display. Pressing this button again cancels the muting function, and it can also be cancelled by pressing one of the function buttons.

⑰ SLEEP timer button

This button is used to set the sleep timer. Each press of this button change the sleep time following order.

10 → 20 → 30 → 60 → 90 → OFF (original display)

The display is dimmed when the sleep timer is set. The setting time passes, the power is turned off.

⑱ TIMER program button

This button is used to activate the timer program.

⑲ DISPLAY button

This button is used to change the display information (source, and present time) or brightness.

Note:

A present time can be displayed when the FM/AM function is set with function button. A present time can be also displayed for 10 seconds in standby mode when the FM/AM function is set with function button.

⑳ ENTER button

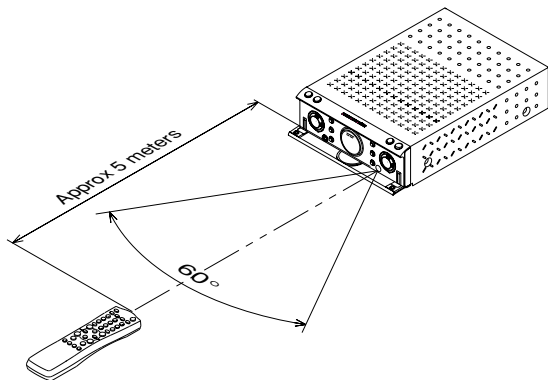
This button is used to decide for the receiver's JOG control.

OPERATION OF REMOTE CONTROL UNIT

1. REMOTE CONTROL

The distance between the transmitter of the remote control unit and the IR SENSOR of the SR110 should be less than about 5 meters. If the transmitter is pointed to a direction other than the IR SENSOR or if there is an obstacle between them, remote control may not be possible.

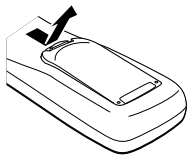
Remote-controllable range



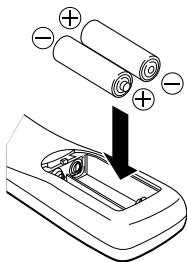
2. LOADING BATTERIES

The life of the batteries used with the remote control unit is about 6 months with normal use. Also be sure to replace batteries earlier when you notice that they are getting weak.

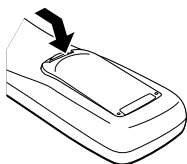
1. Remove the back cover.



2. Insert the new batteries (AA type) with correct (+) and (-) polarity.



3. Close until it clicks.



CONNECTORS AND CONTROLS ON THE MAIN UNIT

Ⓐ Terminal for FM antenna, 75 ohms

For connecting an external FM antenna with a circular plug, or for connecting a cable network.

Terminals for AM antenna and Grounding

To connect the supplied AM loop antenna, use the terminals marked "AM" and "GND".

In areas where the AM loop antenna gives unsatisfactory results, it is recommended that the receiver be connected to an outdoor antenna. Use the terminal marked 'AM' for this. A grounding lead can be connected to the terminal marked 'GND' to further reduce interference. In this case, it must be connected together with the supplied loop antenna.

Ⓑ CD input jacks

Connect to the audio output jacks of a CD player.

Ⓒ AUX input jacks

Connect to the audio output jacks of the TV set, DVD player, etc.

Ⓓ CD-R input/output jacks

Connect the IN jacks to the output jacks of a CD-R player, and the OUT jacks to its input jacks.

Ⓔ MD input/output jacks

Connect the IN jacks to the output jacks of a MD player, and the OUT jacks to its input jacks.

Ⓕ REMOTE CONTROL jacks

Connect to a component equipped with remote control jacks. (Refer to page 3.)

Ⓖ System control switch

This switch selects the system operation mode. Set to SYSTEM position when the unit is being used in combination with a CD (CD110). If your component is not capable of system connection, set this switch to INT position.

Ⓗ AC power cord

Plug into an AC 120V household outlet.

Ⓙ SPEAKER terminals

Connect the left and right speaker leads, observing the + and - polarity of the leads and terminals.

1 STANDBY/power switch and indicator

Press to turn power ON and press again to switch to STANDBY mode. The indicator lights GREEN when power is ON, and lights RED when in STANDBY mode. The indicator lights AMBER when the timer program is set during STANDBY mode.

2 DISPLAY button

This button is used to change the display for information such as clock time.

A present time can be displayed for 10 seconds in standby mode by pressing this button.

The brightness of the display can be changed to dimmer or normal by pressing this button.

3 MUTE button

This button is used to mute the sound from the speakers. When this button is pressed, the speakers' sound level is muted and "MUTE" appears on the display. Pressing this button again cancels the muting function, and it can also be cancelled by pressing one of the function buttons.

4 Door OPEN button

This button is used to open the door.

5 Front panel door

This door be opened by pressing the door OPEN button.

6 IR lens

You can operate the unit even if the receiver door is closed. The infrared signal from the remote control enters the unit through this lens and infrared sensor.

Note:

Never remove this lens. If you remove this lens, the receiver cannot receive the infrared signal from remote control when the SR110's door is closed.

7 JOG control

The JOG control can be used in the AMP, TUNER and TIMER modes. Details of operation are as follows:

AMP mode: Source select (Usual setting)

Balance control (AMP button is pressed twice)
Treble control (AMP button is pressed three times)

Bass control (AMP button is pressed four times)
(When the AMP button is pressed once, volume control mode is set for volume control knob.)

TUNER mode: Frequency scan mode (last operation is memorised)

Preset memory mode (last operation is memorised)

Auto, Mono selecting Mode

TIMER mode: Program and confirm timer setting

For more detail, refer to the respective page.

8 AMP button

The JOG control can be used in the TUNER, AMP or TIMER modes. Press to change the mode of JOG control to AMP mode. 5 seconds after the previous JOG operation is finished, the mode of JOG control will return to AMP mode automatically. You can also use this button to return to AMP mode immediately. The function of JOG control in AMP mode is changed as follows (except the volume adjust mode):

SOURCE select mode: To select input mode.

(Volume adjust mode: To adjust the volume level by turning the volume control.)

Balance control mode: To adjust the speaker balance.

BASS control mode: Tone control (Low frequency)

TREBLE control mode: Tone control (High frequency)

The AMP mode is used for tone control (BASS/TREBLE) and to change also source for JOG control.

9 TUNER button

Press to select FM or AM tuner when another source is selected and select the JOG operation for TUNER selection. Use this button to select the JOG operation for a scan of frequency or preset memory mode. The TUNER button changes modes as below.

FREQUENCY mode: To scan tuning by frequency by JOG control.

PRESET mode: To scan tunings in the preset memory by JOG control.

TUNER mode: To change FM broadcasting to MONO or STEREO.

The "MONO" indicator lights up on the display in MONO position, the "AUTO" indicator lights up when there is no signal and "STEREO" lights up when a stereo signal is received.

Please refer to page 9 for tuner operations.

10 TIMER button

This button is used to program and check the timer program. Please refer to page 11 for timer program operation.

11 BAND button

This button is used to change the reception band to FM or AM.

12 MEMO button

This button is used to set the preset memory of the tuner or clock time.

Please refer to the tuner and timer operations.

13 WOW button

This button is used to change the WOW function level.

Each press of this button change the WOW function level following order.

OFF → LOW → HIGH → OFF

Note:

When this button is pressed, the sound of speakers is muted momentary. This is not malfunction.

14 VOLUME control

To increase or decrease sound level. To increase the sound level turn clockwise, and to decrease turn counter-clockwise.

15 PHONES jack

For connecting a pair of stereo headphones. When the headphones are connected to this jack, the speaker sound is turned off.

Note:

Door cannot be closed when headphones connected.

16 Display panel

This panel shows information on the status of the unit.

17 Infrared sensor

The infrared signal from the remote control enters the unit through this sensor.

CONNECTIONS

SYSTEM CONNECTION

FEATURES OF SYSTEM CONNECTION

- **Synchronized power ON/OFF**

By switching the **power** switch ①/1, you can turn the CD player, CD Recorder and MD deck connected through the REMOTE CONTROL bus connection ON or OFF.

You cannot turn on and off by pressing the power switch of connected components.

- **Auto source selection**

When the CD in the CD110 starts playing by pressing the play button on the CD110, the SR110 receiver will change source automatically.

CONNECT TO SYSTEM CONNECTION

This unit is equipped with the remote control bus function. Connecting it to Marantz AV system components equipped with REMOTE CONTROL jacks, such as a CD player (CD110), means that these components can be remote controlled from this unit (SR110).

Connect the REMOTE CONTROL jacks of this unit to the REMOTE CONTROL jacks of another component using RCA-type pin lead provided.

To operate the SR110 in the SYSTEM mode, the leads from the other components must be connected to the SR110.

The lead from OUTPUT terminal of other component is connected to INPUT terminal of the SR110.

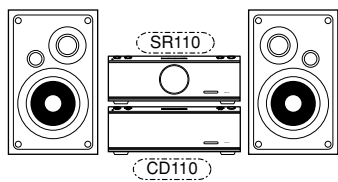
Set the REMOTE CONTROL selector of this unit (SR110) to **SYSTEM** position. Set the REMOTE CONTROL selector of connected components to **EXT** position.

Note:

- Plug into AC outlet after all connections are finished.
- When connecting the supplied audio cable, confirm the red plugs are connected to R jacks and the white plugs are connected to L jacks.
We recommend you use to supplied audio cable.
- When using the supplied digital optical cable, remove the dust cover.
- Attach the dust cover to prevent dust when removing the digital optical cable.
- When connecting the digital optical cable, make sure it is fully inserted.

IMPORTANT

- When the system connection is setup, SR110 and CD110 should be stacked as following figures.



SYSTEM OPERATION

The remote control system can be used to control Marantz system components equipped with REMOTE CONTROL (Bus) jacks and SYSTEM (Bus) jacks, such as CD110. An example procedure for system operation is described below. Here, we take as an example the connection of a CD player (CD110) to this receiver (SR110) through the REMOTE CONTROL jacks. (The numbers of controls and buttons on the main unit are enclosed in □, and those on the remote control are enclosed in ○.)

1. Press the **power** switch ①/1 to turn the receiver power ON.
2. All the components connected to the REMOTE CONTROL jacks are turned ON.
3. Press the **CD** button ② to select CD player as a source and set the remote control to CD mode.
4. Press the "5" of the **numeric** button ③ to select track number 5 of the CD.
5. The CD player (CD110) starts to play the CD.
6. Press the **VOLUME** buttons ⑥⑦ or turn the **VOLUME** control 14 to adjust the listening volume.
7. Press the ■ ① button to stop the CD.
8. Press the **power** switch ①/1 to turn the power off and into the standby mode.

The SR110 receiver and all the components connected to it are turned OFF.

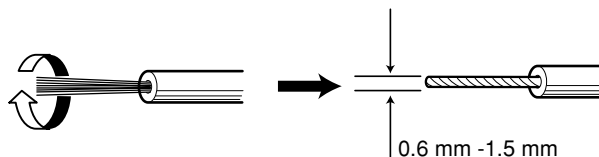
NO SYSTEM CONNECTION

You can use connected components as a single unit by setting the system control switch to **INT** position.

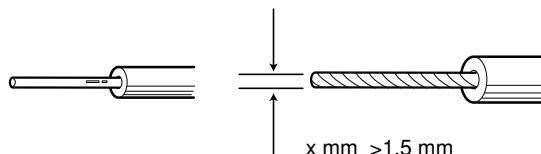
When you use this unit in combination with other Marantz components for which a system connections is not possible, or components of other brands, you can use them independently by setting the system control switch to **INT** position.

NOTE OF SPEAKER CABLE

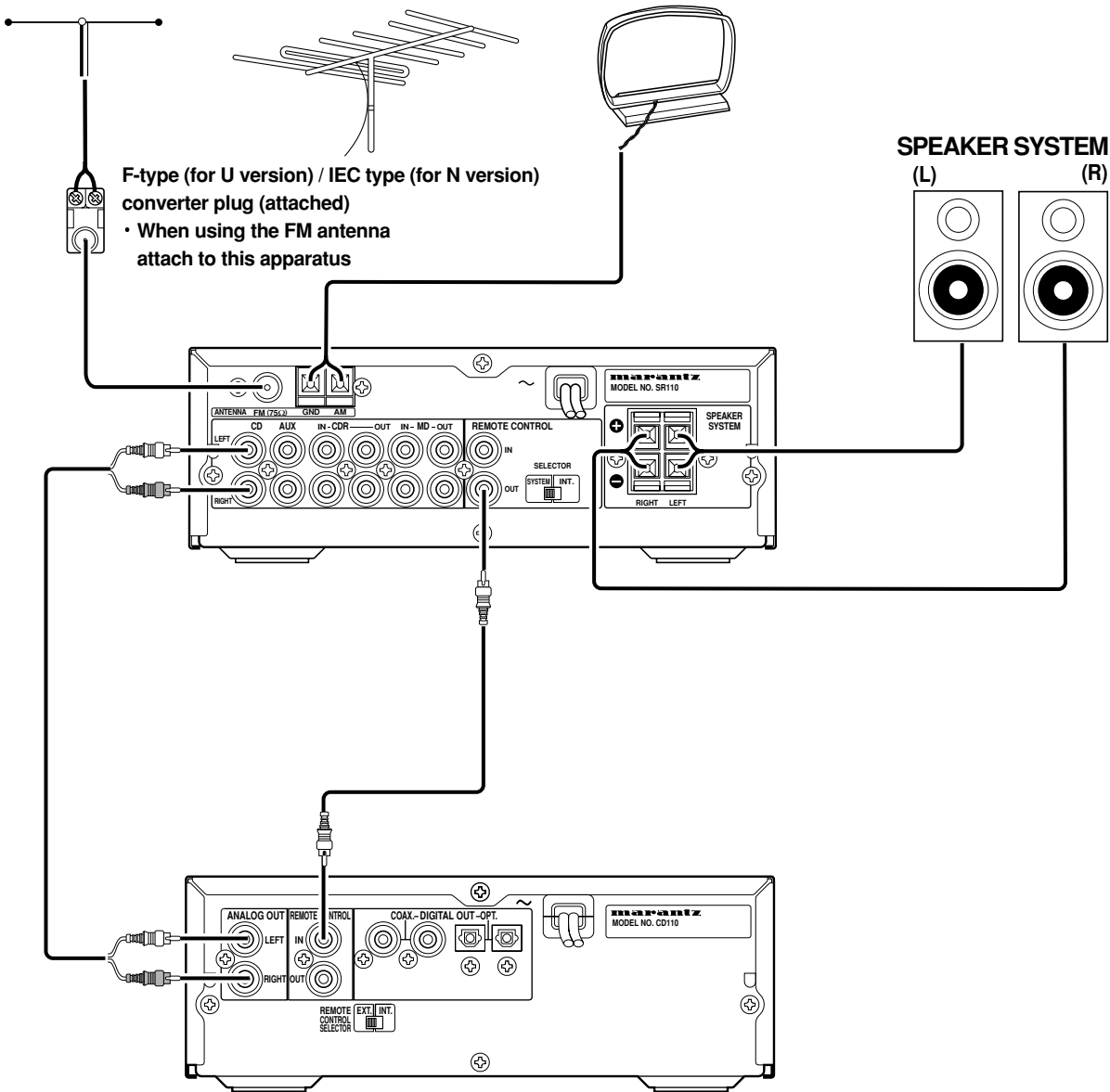
When connecting the speaker cable, you use the cable as following figures;



Never use the cable as following figures. If you use the following cable, the speaker terminal may be damaged.



FM FEEDER ANTENNA FM EXTERNAL ANTENNA AM LOOP ANTENNA



BASIC OPERATIONS

NORMAL PLAY

1. Press the **power** switch ①/1 to turn the power ON.
2. Press the optimum **function** button ② or turn **JOG** control 7 in the SOURCE select mode to select the source to be played. Please refer to the next table.

Function button control on the remote	Source to be played
FM/AM	FM or AM
CD	CD player (CD110)
CDR	CD recorder
MD	MD deck
AUX	AUX (TV game, etc.)

3. Start playing the source component. Adjust the listening volume with the **VOLUME** control 14 or **VOLUME** buttons 6/7.

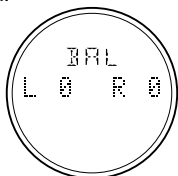
The source selector will change players automatically in SYSTEM mode.

TO ADJUST BALANCE

The speaker balance can be changed by JOG control.

1. Press the **AMP** button 8 twice to set the mode of the **JOG** control 7 to BALANCE mode.

"BAL" is displayed.



2. Turn the **JOG** control 7 to adjust the speaker balance within approx. 5 seconds.



Turn left to increase the "L" digit and decrease the output of the right speaker. Turn right to increase the "R" digit and decrease the output of the left speaker.

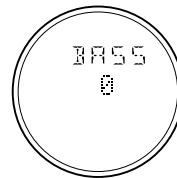
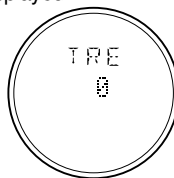
The balance step can be changed up to 13.

3. To set and return the original display, press the **JOG** control 7.

TO ADJUST TONE CONTROL (BASS AND TREBLE)

The Bass and Treble frequencies can be controlled by JOG control.

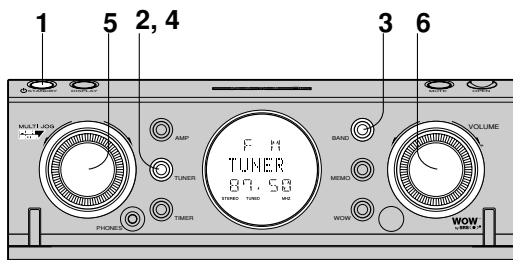
1. Press the **AMP** button 8 three or four times to set the mode of **JOG** control 7 to TONE control mode. "TRE" or "BASS" is displayed.



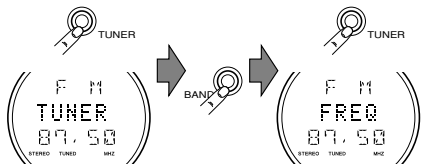
2. Within approx. 5 seconds, turn the **JOG** control 7 to the left to decrease, or to the right to increase step by step. You can both increase and decrease the tone for 5 step. To set and return the original display, press the **JOG** control 7.

TUNER OPERATION

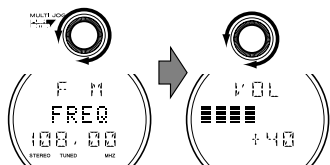
TO LISTEN TO THE TUNER



1. Press the **power** switch ①/1 to turn the power ON.
2. Press the **TUNER** button ⑨ or **FM/AM** button ②. "TUNER" is displayed.



3. To select the band of reception, press the **BAND** button ⑪ or the **FM/AM** ② button on the remote control.
4. Press the **TUNER** button ⑨ to set the frequency. "FREQ" is displayed.
5. Turn the **JOG** control ⑦ clockwise to increase or counter-clockwise to decrease the frequency, or press ►► button ⑫ to increase or ◀◀ button ⑬ to decrease.



Auto scan tuning

To start the auto scan tuning, turn the **JOG** control ⑦ or press and hold ◀◀/►► button ⑫/⑬ for a while continuously. Auto scan tuning stops automatically when a broadcasting station is tuned in, and the "TUNED" display lights up. When SR110 receives stereo broadcasting, "STEREO" display also lights up.

6. Adjust the volume with the **VOLUME** control ⑭ or **VOLUME** buttons ⑥⑦.

To receive sound in monaural, press the **TUNER** button ⑨ until "TUNERMOD" is displayed. Turn the **JOG** control ⑦ to display "MONO".



Note:

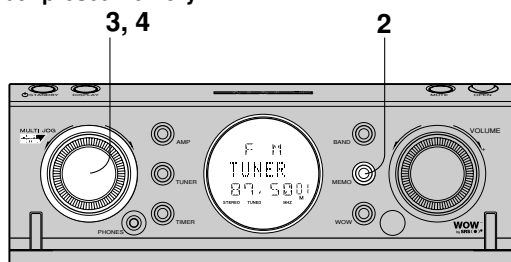
- "AUTO" is set at initial. In this case, the noise is muted when SR110 tunes a frequency of FM band which has no broadcasting.
- Muting of the FM band is not activated when the tuner mode is set to MONO. Please take care with the volume.

PRESET MEMORY OPERATION

The SR110 receiver can store up to 30 stations selected in the FM and AM bands.

The preset memory function allows frequency, receiving mode (STEREO or MONO) and also station name to be stored in the memory. The preset memory can be stored in two ways:

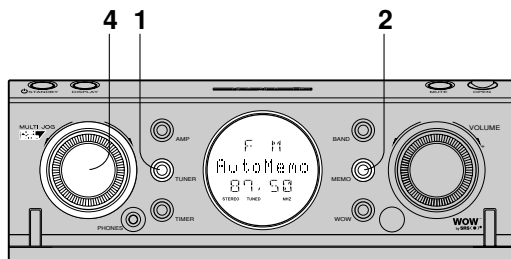
Manual preset memory



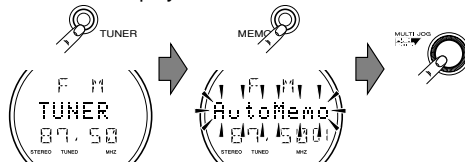
1. Select the desired station, referring to "TUNER OPERATION".
2. Press the **MEMO** button ⑫. The "M" indicator will blink for approx. 5 seconds. During this period.
3. Select the preset number by turning the **JOG** control ⑦ right for up or left for down
4. Press the **JOG** control ⑦ to decide. The preset number can be selected by directly entering it with the numeric buttons on the remote control.

Auto preset memory

This allows a band to be scanned automatically, a station with good reception to be found and to be stored in the preset memory.



1. Press the **TUNER** button ⑨ or **FM/AM** button ②. "TUNER" is displayed.



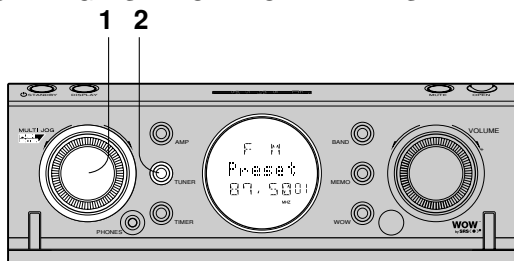
2. Press and hold down the **MEMO** button ⑫ for 3 seconds or more. The auto preset memory operation starts. "AutoMemo" is blinking.
3. When a station is received, scanning pauses for 5 seconds.
4. Press the **JOG** control ⑦ to store the received station within 5 seconds. The scanning restarts after pressing the **JOG** control ⑦.

If the **JOG** control ⑦ is turned within 5 seconds, scanning restarts and the frequency being received is not stored in the memory.

- When up to 30 stations have been preset, the auto preset memory function automatically stops.
To stop in mid-operation, press the **MEMO** button [12] or the "0" button [3] on the remote control.

Note:

- If you operate the auto preset memory again, new received frequency is stored into the preset memory 01 to 30. The previous preset memories are replaced to new one.
- Preset Memory is not erased. Preset memory can be replaced only.

RECALLING A STATION FROM THE PRESET MEMORY

- Press **TUNER** button [9] until "Preset" is displayed.
- Turn the **JOG** control [7] or press the ◀◀ [10] or the ▶▶ button [11] to select a station.
For direct selection with the remote control, press numeric button.

MEMORY BACKUP

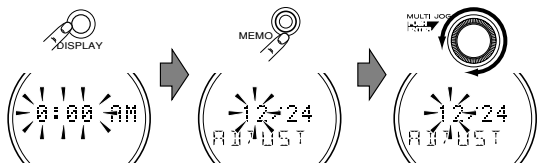
The preset memory is stored for 1 week if the AC plug is pulled out the AC outlet. If this period is longer than 1 week, the memory is cleared. In this time, you need to set the preset memory again.

PRESENT TIME SETTING

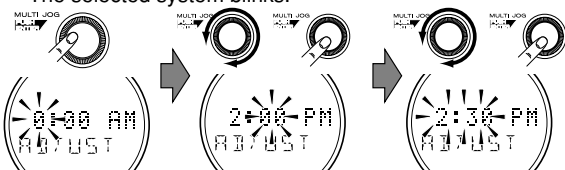
To operate the timer program, you must set the present time. The clock time can be set 12-hour or 24-hour system. The following shows as an example how to set the time as 2:30 PM.

The clock displays "0:00" at initial

Operation using the main unit

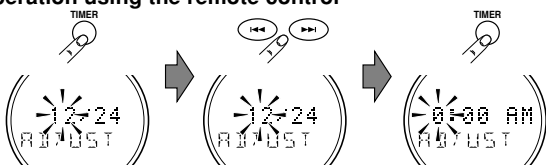


1. Press the **DISPLAY** button **[2]** until the clock time is displayed.
2. Press the **MEMO** button **[12]**. "12/24" is displayed.
3. Turn the **JOG** control **[7]** to select "12". When you select "24", the clock is set 24-hour system. The selected system blinks.

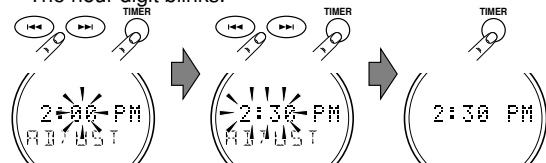


4. Press the **JOG** control **[7]** to desired the system. The hour digit blinks.
5. Turn the **JOG** control **[7]** to set the digits displayed to the left of the colon to "2:00 PM" and press the **JOG** control **[7]**. The minute digit blinks.
6. Turn the **JOG** control **[7]** to set the minutes to "30", and press the **JOG** control **[7]**. The display blinks.
7. Press the **JOG** control **[7]** to confirm the actual clock. The clock now starts.

Operation using the remote control



1. Press the **TIMER** button **[18]** more than 3 seconds. "12/24" is displayed.
2. Press the **Left Arrow** **[9]** **Right Arrow** **[10]** button **[9]** **[10]** to select "12". When you select "24", the clock is set 24-hour system. The selected system blinks.
3. Press the **TIMER** button **[18]** to confirm the system. The hour digit blinks.



4. Press the **Left Arrow** **[9]** **Right Arrow** **[10]** button **[9]** **[10]** to set the digits displayed to the left of the colon to "2:00 PM" and press the **TIMER** button **[18]**. The minute digit blinks.
5. Press the **Left Arrow** **[9]** **Right Arrow** **[10]** button **[9]** **[10]** to set minutes to "30", and press the **TIMER** button **[18]**. The display blinks.
6. Press the **TIMER** button **[18]** to confirm the actual time. The clock now starts.

PROGRAMME TIMER SETTING

You can play marantz CD player CD110, when it is connected with remote control bus correctly.

The timer function is built into this receiver allows you to perform the following operations:

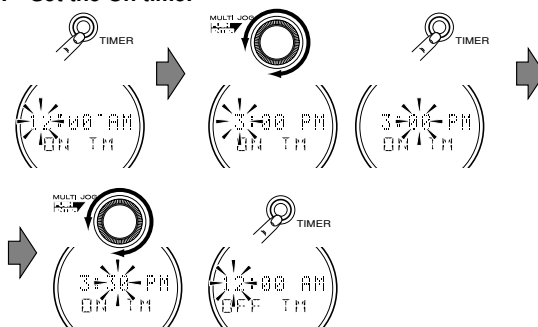
- Setting of ON time and OFF time;
- Setting of source: The source can be selected from tuner, CD;
- It is possible to specify the preset number 1 to 30 or track numbers of CD;
- Setting of single operation (Once) or everyday operation (Everyday).

IMPORTANT:

- The timer setting with track number specified can be used only when the system control switch is set to **SYSTEM** position except when only using the tuner. (Refer to page 6.)

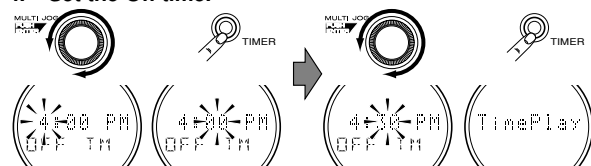
In the following procedure, each button should be pressed within 5 seconds after pressing the previous button.

1. Press the **power** switch **[1]** to turn the power of the unit ON.
2. Press the **TIMER** button **[10]**. The display indicates "ON TM" and the timer section blinks.
3. **Set the On time.**



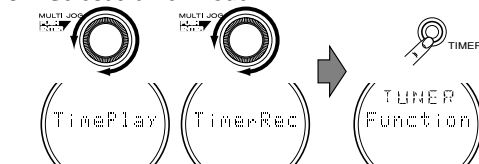
- 1 Turn the **JOG** control **[7]** to adjust the hour for the On time and press the **TIMER** button **[10]**.
- 2 Turn the **JOG** control **[7]** to adjust the minutes for the On time and press the **TIMER** button **[10]**. The display indicates "OFF TM" and the timer section blinks.

4. Set the Off time.



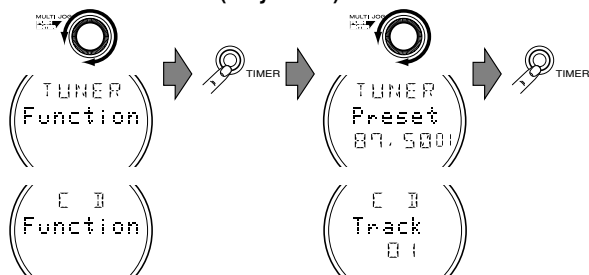
- 1 Turn the **JOG** control **[7]** to adjust the hour for the Off time and press the **TIMER** button **[10]**.
- 2 Turn the **JOG** control **[7]** to adjust the minutes for the Off time and press the **TIMER** button **[10]**. "TimePLAY" is displayed.

5. Select a timer mode.



- 1 Select the "TimePLAY" by turning the **JOG** control **[7]**. The recording mode is unavailable for this version.
- 2 Press the **TIMER** button **[10]**.

6. Select a function (Play mode)

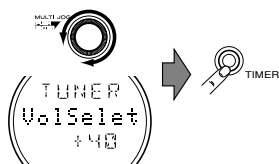


- 1 Turn the **JOG** control [7] to select the source (TUNER or CD) to be played.
- 2 Press the **TIMER** button [10].
- 3 When you select "TUNER", turn the **JOG** control [7] to select a preset number to be received.
When you select "CD", turn the **JOG** control [7] to select a track number to be played.
- 4 Press the **TIMER** button [10].

Note:

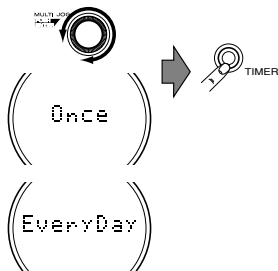
If you select a track number which is not on the CD, the play mode will start track number 1 when the timer activates.

7. Adjust the volume level



- 1 Turn the **JOG** control [7] to adjust the volume level.
- 2 Press the **TIMER** button [10].

8. Set Once or Daily



- 1 Turn the **JOG** control [7] to select the "Once", when you use this programmed event only once.
Turn the **JOG** control [7] to select the "EveryDay", when you use this programmed event everyday.
- 2 Press the **TIMER** button [10].

Note:

If you select the "TimerOff", this setting is cancelled.
In recording mode, the power is turned on before 1 minute at timer setting time.

9. Press the **TIMER** button [10] to decide the setting.
"TIMER" lights up in red. The setting contents are scrolled.
10. Press the **power** switch [1] to set the timer standby mode.
This system (SR110 and the connected components) is set standby mode and the displays are turned off. The power switch of SR110 lights up in amber.

Note:

Timer will not be activate when the power is turned on. Set the standby mode to activate the timer.

You can set the timer standby mode by pressing the **power** switch [1] while scrolling the setting contents.

PROGRAMME TIMER SETTING WITH REMOTE CONTROL

You can set the timer setting with the **power**, **◀◀**, **▶▶** and **TIMER** buttons on the remote control.

Press the **◀◀** or **▶▶** button [9] [10] instead of turning the **JOG** control [7].

Other procedures are same as "Programme Timer Setting" with SR110.

Important

- Timer play mode cannot activate when no disc is inserted in the selected source.

NOTE OF THE TIMER FUNCTIONS

- If the displayed time blinks, the time is incorrect. You need to set the correct time.
- SR110 can save the present time for 5 minutes if the AC plug is pulled out the AC outlet. If the AC plug is plugged into the AC outlet within this period (5 minutes), the present time data is hold. You do not need to set the present time again.

CONFIRM AND CHANGE TIMER SETTING

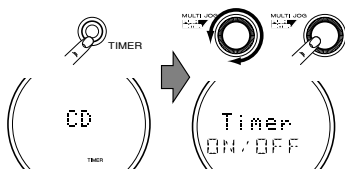
1. Press the **power** switch [1]/[1] to turn the power of the unit ON.
2. Display the contents of timer setting by pressing the **TIMER** button [18]/[10].
The following programmed contents are displayed by pressing the **TIMER** button [18]/[10].
3. You can change the displayed content with the **JOG** control [7] if necessary.
4. Press the **power** switch [1]/[1] again.

Important

- Timer mode is cancelled if you quit confirming halfway through a procedure.
- Never confirm the setting after play mode starts, this will lead to the off timer setting is cancelled and the power is not turned off.

CANCEL TIMER SETTING

1. Press the **power switch** ①/1 to turn the power of the unit ON.



2. Press the **TIMER** button 10 on the front panel until “**Timer ON/OFF**” is displayed.
3. Turn the **JOG** control 7 to select “**OFF**”.
4. Press the **JOG** button 7.

Important

- “**TIMER**” indicator is extinguished when **TIMER** button 10 is pressed for 3 seconds or more in timer playing or recording mode.
- Never set “**Once**” or “**Everyday**” in timer playing or recording mode. If this is set, the off timer is concealed and the power is not turned off. You should no operate after you confirm the setting time, the display will return original.

SLEEP TIMER SETTING (REMOTE CONTROL ONLY)

The sleep timer function allows the unit to be in standby mode automatically after a specified period of time.

1. While the power is ON, press the **SLEEP** button 17 in the AMP mode.
2. Press the **SLEEP** button 17 within 5 seconds. Each press changes the sleep timer period in the order 10 → 20 → 30 → 60 → 90 → OFF(original display).
3. When the desired period is displayed, release the **SLEEP** button 17. After that, setting of the sleep timer is completed and the count starts.
4. Press the **SLEEP** button 17 during the sleep timer count to display the remaining period in standby mode. To change the setting after the sleep timer has started the count, display the remaining time, press the **SLEEP** button 17 while the remaining period is displayed, and repeat steps 3 and 4 above.
5. To cancel the sleep timer, press **SLEEP** button 17 until “**OFF**” is displayed.

TROUBLE SHOOTING

Should faults occur, in many cases it is not necessary to consult your dealer or a Marantz technical service department.

On the basis of the following checks you will be able to rectify a number of faults yourself without difficulty.

If the fault cannot be remedied after the following checks, please consult your dealer or nearest Marantz service agent.

Sound comes from only one side.

- Check the connections of the loudspeaker which is not working.
- Check the connections between the sound source and the receiver.
- If using headphones, check that the plug is properly inserted into the jack.

There is hum, buzz or howl during recording or playing.

- Are the connection plugs pushed far enough into the jacks?

You cannot hear anything, and no indicator lights up.

- The receiver is not turned ON.
- The receiver is not connected to the mains power outlet.
- The mains power outlet is not live.

You cannot hear anything, but an indicator lights up.

- Are the function buttons in the correct positions?
- Is the selected sound source functioning properly?
- Is the volume control high enough? Do not keep it in the maximum position! The display indicates the volume level at the moment the power is turned ON.
- Are the loudspeakers connected properly?

The recording is unsuccessful.

- Is the signal source operated correctly?

The remote control is not working.

- Check that the batteries of the remote control unit are not exhausted.

If they are, replace them with two new batteries.

Easy operation is not working.

When the CD or other component starts playing, the receiver changes source automatically. If this function is not working –

- Check that the system control switch on the rear panel is set to SYSTEM position
- Check the connections of the remote control bus in SYSTEM mode (the system control switch set to SYSTEM position).

Please refer to **CONNECTION OF REMOTE CONTROL bus** page 6.

TECHNICAL SPECIFICATIONS

FM TUNER SECTION

Frequency Range	87.5 - 108.0 MHz
Usable Sensitivity	0 dB μ
Signal to Noise Ratio	Mono/Stereo 70/65 dB
Distortion	Mono/Stereo 0.2/0.3 %
Stereo Separation	1 kHz 40 dB
Image Rejection	98 MHz 80 dB
Tuner Output Level	1 kHz, \pm 40 kHz Dev 500 mV

AM TUNER SECTION

Frequency Range	520 - 1710 kHz
Signal to Noise Ratio	40 dB
Usable Sensitivity	Loop 500 μ V
Distortion	400 Hz, 30 % Mod. 0.5 %
Selectivity	\pm 18 kHz 30 dB

AUDIO SECTION

THD 10 %	6 ohms 25W / Ch
Continuous Power Output (40 Hz - 20 kHz)	8 ohms 21W / Ch
THD (40 Hz - 20 kHz) at 21 W output	8 ohms 0.08 %
Input Sensitivity/Impedance Linear	200 mV/ 47 Kohms
Signal to Noise Ratio Linear (1 W)	80 dB

GENERAL

Power Requirement	AC 120 V 60 Hz
Power Consumption	0.7 A
Dimension (MAX) Width	8-1/4 inches (210 mm)
Height	2-3/4 inches (71.5 mm)
Depth	12-3/16 inches (310 mm)
Weight	9.5 lbs(4.3 Kg)

ACCESSORIES

Remote Control Unit (RC110SR)	1
Dimension (W x H x D) (MAX)	2-1/2 x 7-3/4 x 1-1/8 inches (57 x 196.5 x 27 mm)
Weight	0.2 lbs(90 g)
AA Type Batteries	2
FM Feeder Antenna	1
FM Converter Plug	1
AM Loop Antenna	1
Warranty Card (for USA)	1
Warranty Card (for CANADA)	1
User's Guide	1

Specifications subject to change without prior notice.

COUNTRY	COMPANY	ADDRESS
ALGERIE	Azur 2000	8, Lotissement Ben Hatadi, Alger, Algeria
ARMENIA	NGYIG Ltd.	47 A/75 St. Lalaianis, 375000 Yerevan, Armenia
AUSTRALIA	Jamo Australia Pty. Ltd.,	24 Lionel Road, Mt. Waverley, VIC 3149, Australia
AUSTRIA	Huber & Prohaska GmbH	Taborstraße 95 / Ladestraße 1, Gebäude Hangartner, A-1200 Wien, Austria
BAHREIN	Ambassador Stores	P.O. Box 237,141, Government Avenue, Manama,Bahrein
BANGLADESH	Target	1078, Ramjoy Mohanja Lane Asadgonj, Chittagong 4000, Bangladesh
BELGIUM	Van der Heyden Audio N.V.	Brusselbaan 278, 9320 Erembodegem, Belgium
BULGARIA	Ariescommerce GmbH	Makedonia Blvd. 16, 1606 Sofia, Bulgaria
CANADA	Lenbrook Industries Limited	633 Granite Court, Pickering, Ontario
CHINA	Guang Chang Audio International Co., Ltd.	No.38 Yushan Road, ShiQiao, Pan Yu, Guang Dong, China
CYPRUS	Empire Hifi systems Ltd.	P.O. Box 5604, Nicosia, Cyprus
CZECH REPUBLIC	Audio International	Sokolska 41, 67902 Rajecsko, OKR,Blansko, Czech Republic
DENMARK	Audio Nord	Dali Allé 1, 9610 Noerager, Denmark
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EGYPT	Solimco	9, El Attibaa St. Doki, Cairo, Egypt
ESTONIA	HiFi Club Estonia	Ehte 4, 90503 Haapsalu, Estonia
F.Y.R.O.M.	T.P. KODI	ul.Cedomir Kantargiev 21a, Skopje, Former Yugoslavian Republic of Macedonia
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FRANCE	Marantz France	A division of Marantz Europe B.V., P.O. Box 301, 92 156 Suresnes Cedex, France
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HUNGARY	Infovox Ltd.	Terez Krt.31, 1067 Budapest, Hungary
ICELAND	ID Electronics Ltd.	Armula 38, 108 Reykjavik, Iceland
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IRAN	Home Co.	5th floor no 878 Philips Building Enghelab ave, P.O. 11365/7844 Tehran, Iran
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KUWAIT	alAlamiah Electronics Intl.	P.O. Box 8196, Salmiah 22052, Kuwait
LATVIA	Ace Ltd.	61, LacPlesa Str., Riga LV 1011, Latvia
LEBANON	AZ Electronics S.A., 1,	P.O. Box 11 2833, Beirut, Lebanon
LITHUANIA	Accapella Ltd.	Ausros, Vartu G/5, Pasazo SKG., 2001 Vilnius, Lithuania
MALAYSIA	Wo Kee Hong Electronics Sdn. Bhd.	102 Jalan SS 21/35, Damansara Utama, 47400 Petaling Jaya, Selangordarul Ehsan, Malaysia
MALTA	Doneo Co Ltd.	78 The Strand, Sliema SLM07, Malta
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RUSSIA	Absolute Audio	7/2, Montazhnaya Street, 107497 Moscow, Russia
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SWITZERLAND	Sound Company AG	Postfach, 8010 Zürich, Switzerland
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Printed in China

04/2001

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